Angela Million · Anna Juliane Heinrich
Thomas Coelen *Editors*

Education, Space and Urban Planning

Education as a Component of the City

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Springer

Editors
Angela Million
Urban and Regional Planning (ISR)
Technische Universität Berlin (TU Berlin)
Berlin
Germany

Thomas Coelen
Educational Science and Psychology
University of Siegen
Siegen
Germany

Anna Juliane Heinrich
Urban and Regional Planning (ISR)
Technische Universität Berlin (TU Berlin)
Berlin
Germany

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Editors and Contributors

About the Editors

Dr. Angela Million is professor and head of the chair of urban design and urban development at the Department of Urban and Regional Planning, Technische Universität Berlin (TU Berlin). Since October 2014, she and Prof. Dr. Thomas Coelen have been heading the DFG-funded research project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings". She cofounded and is a board member of JAS—Jugend Architektur Stadt e.V. (YOUTH ARCHITECTURE CITY), an association for built environment education and participation children and young people. She is also a partner at the STADTIDEE city planning office. Her key research areas include the city as a space for education, children and youths in urban development, urban planning classification and participatory urban design.

Dipl.-Ing. Anna Juliane Heinrich has been a research fellow at the chair of urban design and urban development, Department of Urban and Regional Planning, Technische Universität Berlin (TU Berlin), since 2011. Since October 2014, she has been working on the DFG-funded research project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings" (project managers Prof. Dr.-Ing. Angela Million and Prof. Dr. Thomas Coelen). She is writing a doctorate with the working title "Educational Landscapes and their Materialisation in the Built Environment". Her research focuses not only on interfaces between education and urban development, but also on the participation of children and young people in urban development processes and built environment education.

Dr. Thomas Coelen is a professor of education specialising in socialisation, youth education and life course research at the Siegen Centre for socio-scientific educational research (SiZe), at the University of Siegen, Faculty of Education, Architecture and the Arts. Since October 2014, he and Prof. Dr.-Ing. Angela Million have been heading the DFG-funded research project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings". Coelen took his

doctorate in Hamburg, examining identity formation with relation to social spaces. His key research areas include cooperation between youth welfare services and the school, full-service community education, educational landscapes and pedagogical architecture.

Contributors

Dr.-Ing. Andrea Benze is a professor at Munich University of Applied Science, chair of urban design and urban theory. She is also an architect at Berlin Chamber of Architects, an urban researcher and a cofounder of OFFSEA (Office for Socially Engaged Architecture) in London/Berlin and member in Jugend-Architektur-Stadt e.V. (JAS e.V.).

Dr. Nils Berkemeyer is a professor at the Institute of Educational Science, Friedrich Schiller University, Jena (Germany). His research interests are fairness in the school system, school system development research, school system management/school governance/school reform, in-school management, regionalisation within the school system and education network, and school and teaching development. Since October 2013, he has been the chair of the Commission for Administration, Policy and Educational Law (KBBB).

Dipl.-Ing. Christa Böhme is a landscape planner and research fellow at the German Institute of Urban Affairs (Difu), urban development, legal and social division in Berlin.

Dr. Jeanette Böhme is a professor of the pedagogy of schools at the University of Duisburg-Essen's Pedagogical Institute, Faculty of Educational Sciences. Her research and work focus on the empirical corroboration of a media-culture-based schools theory, on spatio-temporal relationships of teaching/learning set-ups, on youth media education and alienation from school and on the methods and methodology of reconstructive approaches in the social sciences and art.

Dr. Petra Bollweg is an adjunct professor at the chair of social pedagogy and extracurricular education at the Institute of Educational Science, Faculty of Social and Behavioural Sciences, Friedrich Schiller University, Jena. Her fields of interest and research are child and youth welfare, school absenteeism, educational landscapes, informality from the perspective of institutional theory, school social work, the post-growth society, social pedagogical education theory and the social movement of urban gardening.

Dr. Wilfried Bos is a professor of educational research and quality assurance at the Institute for School Development Research (IFS) at TU Dortmund University, having directed the institute until 2014. His work focuses on empirical research methods, large-scale assessment studies (KESS, IGLU, TIMSS, ICILS), quality assurance in the education sector, international educational research, evaluation, pedagogical research on China and educational networking and regionalisation

processes. He publishes the Journal for Educational Research Online (JERO). He was previously the head of the KBBB and a convenor of EERA Network 9: Assessment, Evaluation, Testing and Measurement.

Wolfgang Brehmer is the administrative director and head of the Department of Municipal Education Management at the city of Munich's Office of Municipal Education Management and Regulation, part of the Unit of Education and Sport. He also runs the "Lernen vor Ort" ("Local Learning") project.

Dr. Marta Brković was a Ph.D. student at the Sheffield School of Architecture. Today, as the founding director of the NGO ARQubator in Serbia, she carries out research and design on issues related to sustainable learning environments. In her research, practice and teaching, she deals with the topics of sustainable architecture, learning environments, research and design methods in architecture, participative architecture and the educational potential of research and design activities, on the one hand, and the built environment, on the other.

Dr. Thomas Brüsemeister is a professor of sociology, specialising in socialisation and education, at the Justus Liebig University Giessen's Institute of Sociology. His work focuses on research on school development and educational governance, as well as methods of qualitative social research.

Dipl.-Ing. Frauke Burgdorff is a director of the German Foundation for Urban Space and a managing director of German private limited non-profit company specialised in real estate development to enhance the quality of an urban neighbourhood in the city of Krefeld. Her fields of interest and research are spatial planning, professional practice in regional development, future studies and urban planning and project development at the interface between education and urban development and in urban renewal. She is a member of the German Academy for Urban and Regional Spatial Planning and the Association of German Architects (BDA), chair of the User Advisory Council at the Research Institute for Regional and Urban Development (ILS) and a member of the scientific advisory council at the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR).

Dr. Sven De Visscher is a lecturer and researcher in the field of social pedagogy and social work at the University College Ghent. He gained a doctorate in educational sciences based on research into the social pedagogical significance of the neighbourhood for children. His current research interests comprise processes of municipal development in close relationship with social work, adult education and community art practices in an urban context, youth work and youth policy, and the concepts of child-friendly cities.

Dr. Ulrich Deinet is the director of the research centre for socio-spatial action research and development and professor of the methodology of teaching and social pedagogy at Düsseldorf University of Applied Sciences, as well as copublishing the online journal "Sozialraum.de". His work focuses on cooperation between the

youth welfare services and schools, educational landscapes, socio-spatial youth work, the socio-spatial approach, and strategy and quality development.

Dr. Marcus Emmerich is head of the chair of learning and education in adolescence at the University of Applied Sciences and Arts north-western Switzerland FHNW. Previously, he was a senior assistant at Zurich University's Institute of Educational Science. His work focuses on organisation and interaction in the education system, childraising and inequality in a migration society, pedagogical discourses on difference, school improvement and regionalisation.

Viktoria Flasche M.A. is a research fellow on the DFG project "School sites. Study on school buildings over the course of urban neighbourhood change" at the University of Duisburg-Essen's Pedagogical Institute, Faculty of Educational Sciences.

Dr. Thomas Franke is a research fellow at the German Institute of Urban Affairs (Difu), urban development, legal and social division in Berlin.

Dr. Axel Gehrmann is a professor of school education and the director of the Centre for Research in Teacher Training, Vocational Training and School Education at the Technical University Dresden. His research focuses on the history and theory of schools and teaching; empirical research on teachers and teacher training; changing careers to work as a teacher; indicator-supported education reporting; regional school improvement; and educational governance.

Björn Hermstein M.A. is a research fellow at the chair of school pedagogy and school development at the Institute of Educational Science, Friedrich Schiller University, Jena (Germany). His topics of interest are school improvement planning, educational sociology, the theory and empirical study of managing the school system, sociological theory and justice as an observational category.

Ian Hextall is a research fellow at the University of Roehampton and Goldsmiths College in London. He taught for many years in higher education at Goldsmiths College and at the Institute of Education at the University of Kent, South Bank University and the Laban Centre. Policy research has been the main focus of the four ESRC projects in which he has been involved. He is currently doing research on the cooperative school movement and plays an active role in water aid.

Katharina Hoffmann B.A. is currently studying a master's degree in education at Kiel University, focusing on human geography. Since 2010, she has been working in the Department of Geography, Europa-Universität Flensburg, first as a student assistant and then as a research assistant. Her work focuses on research in the geography of education.

Dr. Holger Jahnke is a professor of geography and the didactics of geography at the Interdisciplinary Institute of Environmental, Social and Human Sciences,

Department of Geography, Europa-Universität Flensburg. He is also a long-term member of the research group on the geography of education at the German Geographical Society (DGfG); since 2010, he has been a society spokesman. In geographical educational research, his work currently focuses on peripheral spaces and the development of educational landscapes in European border regions.

Anja Jungermann M.A. studied international politics and European studies in Bremen and Warsaw. After her studies, she started out by working for the European Commission's Directorate-General for Education and Culture, going on to become a fellow at the non-profit initiative Teach First Deutschland, at a secondary school in Duisburg. Since September 2009, she has been a research fellow at TU Dortmund University's Institute for School Development Research (IFS). She carries out research in the field of education, local educational networks between schools and their surroundings, and network-based school improvement.

Dr. Fabian Kessl is a professor for theory and methods of social work at the University of Duisburg-Essen's Faculty for Educational Sciences, department for social work and social policy. His work focuses on how the welfare state can transform situations of education, formative education and care, especially issues around producing and reproducing urban spaces, and analyses of power and discourse.

Dipl.-Sozialwiss. Julia Klausing is a research fellow in sociology at Justus Liebig University Giessen, specialising in socialisation and education. Her tasks include working on accompanying academic research for the national "Lernen vor Ort" ("Local Learning") programme in cooperation with Rambøll Management Consulting GmbH. At the same time, as part of her proposed doctoral thesis, she is working on issues around managing and coordinating educational processes and actors on the municipal level.

Dr. Gerd Kuhn is a research fellow at the Department of the Sociology of Architecture and Housing, Institute of Housing and Design, Faculty of Architecture and Urbanism, University of Stuttgart. He is the managing director of various research projects, a copublisher of "Informationen zur Modernen Stadtgeschichte" (IMS), a supervisory board member of Bau- und Heimstättenverein Stuttgart, a committee member of Stiftung Selbsthilfe and the Ernst May Society, chair of the Bundesverband Baugemeinschaften advisory board and, since 2014, urbi_et stadt forschung praxis, Tübingen office: an interdisciplinary network for urban research and its practical implementation. His research focuses on social and spatial professionalism of suburban urbanism, the history of urban life, the culture of social mixtures in the city; housing co-ops as the new building contractors, and how we shape and use public spaces.

Markus Lindner M.A. has a master's degree in political science, Hamburg. He was a project manager for the research team behind the federal programme "Lernen

vor Ort" ("Learning Locally") and senior advisor at the Department of Education, Family and Social Participation at Rambøll Management Consulting GmbH. Currently, he works as a scientific assistant at the German Children and Youth Foundation (Deutsche Kinder und Jugendstiftung), where he mainly works on background research and evaluation for education policy programmes. On all these projects, one focus of his qualitative research is on analysing processes of implementation, as well as structural issues around cooperation, networking and managing actors in the education system. His current work is related to the programme "Transfer Agencies", a kind of successor programme of "Learning Locally" funded by the Federal Ministry of Education and Research.

Christine Loth M.Sc. is a research fellow of the DFG-funded research project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings" at the Siegen Centre for socio-scientific educational research (SiZe), at the Siegen University's Faculty of Education, Architecture and the Arts. Her topics of interest are urban development, public spaces, local educational landscapes and pedagogical architecture.

Dr. Joana Lúcio gained her doctorate at the Faculty of Educational Sciences of the University of Porto (Portugal) on the subject of the Educating Cities movement. She has run several research intervention projects in the field of local development, taking a particular interest in informal educational processes and the role of civic associations, municipalities and SMEs. She is currently a research fellow at the CIEC Research Centre on Childhood Studies at the University of Minho, Braga (Portugal), and a link convenor for Network 14, Communities, Families and Schooling in Educational Research, at the EERA, as well as being a trainer in the field of social and pedagogical mediation.

Dr. Wolfgang Mack is a professor of special education, focusing on SEN adult and vocational training, at Ludwigsburg University of Education. His work focuses on the fields of educational research, the theory of coping with life, transitions in education, training and paid work, educational landscapes and cooperation between the youth welfare system and the school.

Dr. Pat Mahony is Emerita Professor of education at the University of Roehampton and visiting professor at King's College and Goldsmiths College, London. She has extensive experience in research and publications in teacher education and social justice, taking part in more than 30 projects financed by a series of organisations. She has written nine books and more than 70 articles and chapters.

Dr. Laura Healey Malinin AIA is a licensed architect, a cognitive scientist and an assistant professor of interior design at Colorado State University. Her interest in school design is based on her experience in the architectural schoolroom planning and her work in schools, including developing school curricula for middle and high schools which combine the STEM subjects and design-based learning. She also

teaches students from the faculties of architecture and interior design the principles of school design and participative design/build activities. Her research interests cover the relationship between cognition and the designed environment, such as the question of how workplaces and educational settings can promote creativity, health, well-being and environmental awareness.

Dr. Veronika Manitius studied educational science at TU Dortmund, going on to work there as a research fellow at the Institute for School Development Research (IFS) and gaining her doctorate. Subsequently, she became a research fellow at the chair of school pedagogy and school development, Friedrich Schiller University, Jena, where she mainly dealt with issues around the justness of the school system, teachers' views of justness, research into school system development, regionalisation within education, network-based school improvement and social indicators research. Currently, she is a consultant of the State Institute for Schools QUA-LiS NRW (Germany) and is working towards a lecturing qualification at Friedrich Schiller University, Jena.

Dominique Matthes M.Ed. is a doctoral student and research fellow at the chair of school education/general didactics at the Technical University Dresden, Institute of Education. Her research focuses on spatial concepts adopted by teachers as part of an investigation into the symbolic structures of school architecture in the teaching profession.

Dr. Stephan Maykus is a professor of social work at Osnabrück University of Applied Sciences and an outside lecturer in educational science at Universität Hamburg. His work focuses on child and youth welfare theory, research and practice, and the foundations of municipal social pedagogy.

Dipl.-Pol. Sebastian Niedlich is a researcher at Freie Universität Berlin, Department of Education and Psychology, Division of General Education. His research focuses on educational governance and networks, including evaluations of the federal programmes "Lernen vor Ort" ("Learning Locally") and "Lernende Regionen" ("Learning Regions"). He is a copublisher of the book series "Institutionenforschung im Bildungsbereich", which first came out in 2013.

Dr. Lars Niemann is a project manager at GK Software AG. After studying urban and regional planning and architecture in Cottbus and Valladolid (Spain), he freelanced for various planning offices in the Berlin area. He is a research fellow at the chair of urbanism and design at Brandenburg University of Technology Cottbus and research fellow from 2003–2013 at the Department of Urban Design and Land-Use Planning at the Faculty of Spatial Planning, TU Dortmund. He was a visiting lecturer in urbanism at the Universidad del ISTMO, Guatemala, and founded the office Stadtidee—Städtebau.Prozess.Kommunikation, which he co-owned until 2013. In 2013, he gained a doctorate on the subject of "managing local educational landscapes".

Dr. Alexandra Nonnenmacher is a professor of methods of empirical educational and social research at the Department of Educational Science/Psychology at the University of Siegen. Her work currently focuses on methodical and methodological issues around context analyses, urban sociology, social inequality and political sociology.

Dr. Thomas Olk was a professor of social pedagogy and social policy at Martin Luther University of Halle-Wittenberg since March 2016. His work focused on research into children and young people (and their welfare services), civil society and local education.

Dr. Dr. h.c. mult. Hans-Uwe Otto is a senior research professor and spokesperson for the North Rhine-Westphalia research school on “Education and Capabilities” at the University of Bielefeld and TU Dortmund. He is a spokesperson for the Bielefeld Center for Education and Capability Research at the University of Bielefeld and an adjunct professor at the School of Social Policy and Practice, University of Pennsylvania, Philadelphia, USA. His fields of interest and research are informal education, child and youth welfare, theory of professionalism, social justice, welfare production and the capability approach.

Dr. Rosie Parnell is a reader in architecture at Northumbria University. Her research, practice and teaching combine interests in design process and participation, architecture education and children’s spaces. She often links these fields of interest in projects to engage children in architectural design, or in teaching that seeks to engage students in directing their own learning. Her most recent research project—Designing with Children—explores spatial designers’ experiences of working directly with children. Rosie is a founder member of the international children’s architecture education network, PLAYCE.

Dipl.-Päd. Sascha Pelzmann is a Ph.D. student at the Technical University Dresden, Institute of Education. His research focuses on new forms of management in the school system, educational governance and vocational teaching at the Anna-Haag-Schule in Backnang (pedagogy/psychology/social pedagogy).

Dr. Christian Reutlinger is a professor at the University of Applied Sciences St. Gallen (FHS). He is the head of the Institute of social work and senior lecturer in social education and social policy and is responsible for the Competence Centre for Research on Social Spaces at FHS St. Gallen. His areas of expertise include the analysis of social spheres, social geographies of childhood and youth, European youth research, social neighbourhood, community and transnational social work.

Hari Sacré M.A. is a researcher in the field of social work at the University College Ghent. He studied social work and cultural studies. His current research interests are related to youth work, processes of municipal development, concepts of child-friendly cities and semiotics.

Rainer Schweppe has been the city of Munich schools inspector since July 2010; he is also a member of the selection panel for the Bosch Foundation/Heidehof Foundation German Schools Award.

Dr. Otto Seydel is the head of the Institute of School Development. He is a member of the team of authors behind the fundamental work on schools construction: Montag Stiftungen Jugend und Gesellschaft I Urbane Räume (ed.) (2011). Schulen planen und bauen. Grundlagen und Prozesse. Berlin: Jovis. He is also a coauthor of the guidelines for efficient school buildings in Germany (2013) published by the Montag Foundation in cooperation with the BDA and the VBE.

Dr.-Ing. Christina Simon-Philipp is a professor of urban design and urban planning at HFT Stuttgart—University of Applied Sciences, Faculty of Architecture and Design. Since 2014, she has been working at urbi_et stadt forschung praxis, Stuttgart office, interdisciplinary network for urban research and its practical application. She is a member of the Baden-Württemberg Chamber of Architects (AKBW), the Association of Town, Regional and State Planning (SRL), the German Academy for Urban and Regional Spatial Planning (DASL), the Baden-Württemberg Regional Working Group of the Academy for Spatial Research and Planning (ARL), Deutscher Werkbund Baden-Württemberg (dwb), DOCOMOMO Germany and the City of Stuttgart Urban Design Committee. Her research focuses on housing construction and district development, the housing heritage from the 1950s to the 1970s, the design and use of public spaces and urban development and renewal.

Ivanka Somborski M.A. was a research assistant at the Siegen Centre for socio-scientific educational research (SiZe) at the University of Siegen, Faculty of Education, Architecture and the Arts until March 2016. Since October 2014, she has been working on the DFG-funded research project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings" (project managers Prof. Dr.-Ing. Angela Million and Prof. Dr. Thomas Coelen). Her research activities focus on cooperations and governance arrangements in the field of local educational landscapes in the context of integrated urban development.

Dr. Heinz-Jürgen Stolz works at the Institute for Social Work e.V. (ISA) in Münster. He is currently working as the head of the regional liaison office "Leave no child behind! Preventative measures in NRW's municipalities".

Dr. Vicki Täubig is an assistant professor for educational research, focusing on informal learning in adolescence, at the University of Siegen. Her work focuses on youth research at the interface between school and child or youth welfare, and on migration research. While working at the German Youth Institute (Deutsches Jugendinstitut, DJI) on the research project "Local Education Networks in Cooperation of All-Day Schools and Youth Services" (2007–2010), she investigated the formation of educational landscapes. The project was funded by the BMBF, and its goal was empirical fundamental research in this field.

Mario Tibussek M.A. works in geography and Latin American studies. Since 2006, he has been working for the German Children and Youth Foundation (DKJS), where he has run several programmes and initiatives on the topics of educational landscapes, fair equality of opportunity and cooperation between the state/municipality and the foundation. Previously, he worked for several years in urban and regional development in Guatemala, Colombia and Chile. His greatest scholarly passion is the overlap between the two topics of urban development and education and the question of how these two disciplines can be brought together for the benefit of every single child or young person. He is responsible for this set of topics, which he also represents on various expert committees, as part of "Transferagenturen für Großstädte" (career transition agencies for cities).

Dipl.-Ing. Urs Walter is an architect and associate professor for architectural design and building technology at the Architecture and Urban Design Department of the German University in Cairo, Egypt. In cooperation with the Egyptian Ministry of Transport, he investigates how inner city areas left derelict for reasons related to transport can be activated as neighbourhood meeting zones for the rapidly growing residential areas. One particular focus is on spaces for young people, who are making up a growing section of the population, and for whom there are few activating programmes altogether in public spaces. Previously, Urs Walter taught for five years as a research fellow at the Institute of Architecture at TU Berlin; his subject was the development of educational landscapes within city districts and intelligent neighbourhood models during housing construction projects.

Dr. Günter Warsewa is a senior researcher and director of the Institute Labour and Economy (IAW) at the University of Bremen. His current fields of work are urban and regional research (structural change at ports), labour research (governance of the earning system) and institutional change (dissolution of boundaries within the school system).

Alexandra Wicht M.A. is a research fellow and doctoral student on the DFG project "The effects of regional and neighbourhood contexts on young people's aspirations and access to vocational education and training in Germany" at the University of Siegen (project manager Prof. Dr. Wolfgang Ludwig-Mayerhof). While taking her master's degree in social sciences, she already dealt particularly with the topic of school-to-work transitions, focusing on the interplay between the influence of individual educational qualifications, on the one hand, and the influence of opportunity structures on regional labour markets, on the other. Her research interests are in the field of the sociology of education and labour, especially taking spatial inequalities into account.

Common Points Between Urban Development and Education

Thomas Coelen, Anna Juliane Heinrich and Angela Million

Abstract Education is and has always been one of a city's important functions, and it is now also increasingly being taken into account by urban planners. At the same time, various places of learning are at the focus of the education debate. Thus, not only are planning and educational practice beginning to share a field of action, but the need for interdisciplinary research approaches is becoming increasingly clear. This chapter, which is also an introduction to the anthology "Education, Space and Urban Planning", takes up the subject of how urban development and education connect and meet in national programmes and their municipal implementation, as well as examining the special role allotted to what are known as "educational landscapes". The chapter focuses on shared topics which come up in urban development and education policy, on the classic socio-spatial levels of the school, the neighbourhood, the city as a whole and the region; topics also suggested by the concept of the book. Based on discussion among experts, it identifies the interdisciplinary research required in various fields: the contexts, different scales and architectures of education (and places of education); the effects which education has on urban development; the instruments used for school and city planning, and research methods.

T. Coelen (✉)
Faculty of Education – Architecture – Arts, University of Siegen, Adolf-Reichwein-Straße 2a, 57068 Siegen, Germany
e-mail: thomas.coelen@uni-siegen.de

A.J. Heinrich · A. Million
Department of Urban and Regional Planning (ISR), Urban Design and Urban Development, Technische Universität Berlin/TU Berlin, Hardenbergstraße 40A, 10623 Berlin, Germany
e-mail: juliane.heinrich@isr.tu-berlin.de

A. Million
e-mail: angela.million@isr.tu-berlin.de

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Education has always been one of the most important functions of cities. Accordingly, the Latin term "urbanus" has two original meanings: it indicates firstly the characteristic atmosphere of a city, and secondly an educational background: from the seventeenth century, educated, cosmopolitan people were described as "urbane". At the same time, institutions for child raising, childcare and education have always basically reflected their respective time and society, with pedagogical and political concepts and perspectives constantly changing, but with physically constructed space far more long-lasting.

The topic of education is currently once again the subject of extremely wide-ranging social and political debate, with learning, knowledge and skills being seen as increasingly important resources in the constantly developing knowledge-based societies. In the most recent debate, moreover, it is becoming clear not only that urban space provides important places of learning but also that education is becoming an ever more frequent starting point for urban and neighbourhood development initiatives: urban development is increasingly turning into an actor within a municipal educational policy that is increasingly high-profile, and pedagogical actors understanding themselves to a greater extent, and more frequently, as part of urban contexts. In this context, we understand urban development as policies, strategies and projects to plan and to develop cities and regions, city districts and neighbourhoods.

However, in the fields of educational science and educational research, as in planning theory, there is a lack of in-depth engagement with the relationships (which are, however, said to be positive) between educational measures and urban development. In particular, there have so far been few recent empirical studies on education as a component of the city. Accordingly, this anthology studies the relationships providing examples of how connections are (and could be) created between the education system on one hand, and urban and neighbourhood development strategies, on the other.

Various Places of Learning at the Focus of the Education Debate

During the PISA[1] debate in Germany, which was provoked after the PISA assessment in 2000 and as well as other international studies, an intensive exchange of ideas developed between educational policy and educational science. One of the

[1]PISA: Program for International Student Assessment by the OECD.

threads of this discussion dealt with the comparatively poor performance by German schoolchildren in comparative international studies, which could not be explained entirely by deficits in school lessons, but instead drew attention to various other forms and settings of learning (cf. BMFSFJ 2005). It was with this in mind that, early on in the debate, the Federal Advisory Board on Youth Policy (*Bundesjugendkuratorium*) called for a new understanding of education taking into account extracurricular settings and processes (cf. BJK 2001; BJK et al. 2002). This demand has been supported by more recent studies (for an overview see Reutlinger 2009) showing that the development of schools is, among other things, influenced by their regional or municipal surroundings. The anthologies by Prölß (2003) and Otto and Rauschenbach (2004) also played a key role at this early stage of the discussion. The former provides a summary of existing political positionings, theoretical contributions and examples from practice and criticises the fact that the education debate is restricted to the school as a place of learning. The latter volume contrasts the understanding of learning based on school performance with a wide-reaching understanding of education from an academic perspective.

These positionings were taken up in the Twelfth Report on Children and Youth, published by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ 2005), which was the first to describe a broad-ranging understanding of education as a guiding light when designing educational processes. The report contributed to increasing consensus on an integrated understanding of education in German politics and research. It covers formal and informal learning processes, as well as giving equal importance to formal and non-formal settings (cf. Vogel 2008). Among other things, formal learning processes are characterised by obligation, a curricular structure and certification; for learning subjects, this mainly involves moving towards instrumental, rational results and products. Informal learning processes tend to be optional and focused on development; their content and methodology may largely be influenced by the learning subjects. Running transversely to this view of gradual distinctions between processes, the term “educational setting” underlines the different institutionalised places in which learning processes can take place, which are more or less pre-structured by society. While formal educational settings are mainly anchored in a certain organisation, institution or place, with a legally defined educational purpose, non-formal settings are fragile, part of people’s lifeworlds and not necessarily spatially defined (cf. Deinet and Icking 2011; Mack 2009). In practice, these analytically distinguishable settings, on the one hand, and educational processes, on the other, always occur as an amalgamation, i.e. in various graduations and ratios. In terms of content they have four connections with the world and are associated with corresponding spheres of responsibility: these links are cultural/cognitive, material/instrumental, social/communal and personal/aesthetical (cf. BMBF 2004).

This broad understanding reveals clearly that education takes place not only during school lessons but also in families, children’s day-care centres, associations, youth clubs, family support centres, cultural activities, public spaces and even within a peer group or through digital media. For this reason, numerous authors, such as Harring (2010, p. 21) note that “learning in a school context […] only

makes up a fraction of all young people's educational processes". According to this understanding, education takes place in all kinds of different places and spaces. This increased attention being paid to different educational settings is thus making not towns and regions, and above all, city districts and neighbourhoods ever more important in the debate on education. They provide a variety of spatial situations and opportunities, creating a setting for educational processes, as well as themselves being shaped through such processes (cf. Mack 2009). It is precisely in this way that urban development, too, is becoming the focus of the current debate on "contemporary education" (cf. Otto and Oelkers 2006).

National Programmes for Urban Development and the Education System

The urban development funding programme set up in 1999, "City neighbourhoods with special development needs—Social City", already indicated that there were links between urban development and the education system. More than half of the municipalities involved focus on the field of action "Neighbourhood schools and education" with the aim of curbing the spiralling negative development trends in disadvantaged neighbourhoods (cf. Difu 2012; Bundestransferstelle Soziale Stadt 2006). Strategies regularly used in this field include creating additional activities during the afternoons and leisure time; extending all-day day-care services; improving the living environment with regard to spaces for play and learning, and running schemes to improve people's health and language skills (cf. Institut für Entwicklungsplanung und Strukturforschung 2005).

Moreover, since 2008, five model projects by the National Urban Development Policy have addressed the link between the education system and urban development. In the discussion on practical planning issues, the project backers provided a stimulus by putting forward theses on the interplay between education and the city (cf. Biernath et al. 2009, p. 2f.):

- Educational facilities and opportunities shape the neighbourhood.
- Educational institutions should be conceived of as an element of urban development, to make sure that educational opportunities are not thwarted by contradictory planning.
- Urban development planning and educational planning need to be connected.

Moreover, those involved in the five model projects defined the following overlaps between the education system and urban development:

- good educational opportunities can improve the quality of living in cities and foster integration;
- education investments in certain locations and areas can stabilise city quarters and neighbourhoods;

- creating city structures, which promote mixed use, can create educational settings; and
- educational institutions can be identity-establishing and can contribute to image improvements (e.g. cf. BMVBS 2009).

The aim of the paper cited here is to add the topic of education to the “Leipzig Charter on Sustainable European Cities” (BVMBS 2007). Those working on the model project call for education to be ascribed greater importance in future urban development funding (cf. Burgdorff and Herrmann-Lobreyer 2010).

The programme “Social City” and the model projects for the National Urban Development Policy show that education can be a “key factor for sustainable, integrative neighbourhood development” (Baumheier and Warsewa 2009, p. 21, own translation). This raises new questions on how the two topics are linked, especially as the overlap between the two fields have not yet been precisely defined, and there has been too little empirical research into the matter.

Thus, while the discourse and practice applied among actors from the fields of child raising, child care and education, on the one hand, and urban planning and development, on the other, have long been running parallel to one another (cf. Burgdorff and Herrmann-Lobreyer 2010), recently some initial experience in practice has led to an increasing number of integrated approaches (cf. Uttke et al. 2013).

Urban Development and Education in Municipal Practice

In the context of municipal self-government, German cities and communities traditionally play central administrative roles in the field of education and social issues. Thus, the cities and rural districts are public providers of child and youth welfare (mainly childcare, youth work and family support). Cities are providing educational infrastructure such as libraries, museums and adult education colleges.

In the field of schools, they support schools providing general and vocational education. They are responsible for the so-called ‘external’ school issues, such as construction, conversion and maintenance of school buildings and the management of school locations (Difu and Wüstenrot Stiftung 2010; Weiß 2011). Supplementary, the German federal states are mostly responsible for educational content, the so-called ‘inner’ school issues.

On this basis, since the 1990s, there has been an extensive process of municipalisation in the field of education (cf. Weiß 2011): The mere responsibility for the ‘external’ school issues is being developed toward a more integrated municipal educational planning (Hebborn 2008, pp. 958, 966; Weiß 2011, pp. 9–28). In recent years, it has been notably supported by a declaration of the Association of German Cities (Deutscher Städtetag 2007). The so-called Aachen Declaration stresses that a comprehensive understanding of education should be the basis of all municipal

reform efforts and that the municipal level is the starting point for all educational processes.

Reasons for municipalisation include the greater need for coordination (e.g. when opening up schools for other public uses and services), various school building and construction projects, new staffing groups (especially in *Ganztagsschulen*, which offer extracurricular educational activities, extending the German school day; cf. Coelen and Stecher 2013), the need for integrative planning approaches (e.g. merger of city school departments with youth service departments, the connection between school planning and city planning) and a vested interest in developing education as a location factor (not only for reasons of economic development, but also due to demographic developments and to reduce social costs). Other reasons for education's rising status as an element of integrated urban development strategies also include municipal challenges such as demographic change, tight public finances, growing tendencies towards segregation and polarisation of society, and increasing regional competition as well as re-urbanisation (cf. Kessl and Reutlinger 2012; Leimkühler and Schöne 2012; Difu and Wüstenrot Stiftung 2010; Burgdorff and Herrmann-Lobreyer 2010; Simon-Philipp 2010).

Viewed in terms of social theory, this municipalisation of education should be interpreted as a phenomenon of the post-welfare state, in which economic policy is increasingly making use of the social services and education, with the intention of making citizens more integrated in the system as the primary means of encouraging their social integration (cf. Emmerich 2010). In this "roll-out neoliberalism" (Peck and Tickell 2002) the focus is not only on adapting individuals to the labour market but also on "governing through community" (ibid.). This is why the individual and the neighbourhood are growing in importance as target dimensions within political change. Accordingly, the aim of many municipal education plans is increasingly to coordinate places and actors from the "triad of child raising, child care and education", with the municipalities taking on a growing role behind the wheel (cf. Olk 2008) or at least being called upon to take control. Hand in hand with this comes an increasing focus on "local learning" which—though the methods are similar—involves a paradigm contradictory to traditional community education, which is usually group-based and emancipatory. It is often based on an understanding of space which reduces it to a geographical, physical, material phenomenon, whereas more advanced understandings of the term pick up on the sociopsychological concept of appropriation, extending "social space" considerably to include subjective appropriated spaces: space is then seen as a relationing between structures and actions (cf. Löw 2001; Kessl and Reutlinger 2012).

The Concept of This Volume

"Education, Space and Urban Planning" picks up on the existing terminological definitions, programmes and concepts described above, as well as on experience gained in practice, research results and studies needed at the point of contact

between the topics of urban development and education. It also brings together insights from different fields and disciplines in one volume. The anthology contextualises the subject of education on different scales of urban and regional development: the region, the city, the district, the neighbourhood, the site and building scale. Existing discourses are interlinked on different levels:

- angles and insights from the fields of urban research and planning, geography, architecture and education/educational research, child raising/the theory of child raising, and educational theory are brought together,
- German-language discussions are compared with debates from other countries,
- theory and practice are contrasted,
- experience gained by established researchers and practitioners is merged with the approaches and views of young scholars and practitioners.

This volume was first published in German ("Stadtbaustein Bildung") with Springer VS in 2015. The anthology "Education, Space and Urban Planning" is a revised version with an additional chapter giving insight to research results of our own studies on links between the education system and urban development.

Schools and the Neighbourhood

The first section, "Schools and the Neighbourhood", is about the connections between scholastic educational institutes and their immediate urban environment. Looking at architecture and urban planning, it examines the design of educational buildings, as well as school catchment areas, where thought is being given to new school functions.

Otto Seydel, a school improvement planner, focuses on the reasons why the relationship between schools and neighbourhoods should be developed, and how exactly this can take place. In his piece "Reflections on the Relationship Between Schools and the City" he identifies approaches which can be taken in terms of spaces and strategies: bringing community experts into lessons, visiting places of learning outside the school, using school buildings outside school hours, using schools as a community centre.

In their chapter "Schools and Education as Part of the 'Social City' Programme", landscape planner Christa Böhme and geographer Thomas Franke describe how this field of action has developed during the programme of that name. While, at the beginning, the central measures revolved around improving infrastructures, over time the social, integrative aspects grew considerably more important. The focus thus shifted to include schools as actors and places of learning and integration in the neighbourhood.

Social scientist Günter Warsewa's chapter "Neighbourhood-based School Strategies for Education and Integration" provides a comprehensive outline of the problems currently faced by schools. As a future development approach, he

addresses the functional, social and institutional dissolution of boundaries within schools: as well as their traditional task of education, further tasks should be taken on related to integration and childcare, and pupil-teacher relationships should be complemented by other relationships with parents, neighbours and experts, involving cooperation and exchange.

Educational theorists Jeanette Böhme and Viktoria Flasche add another aspect to the discussion with their piece "Spatial Traces of Pedagogical Constructions of Meaning over the Course of Urban Change": school buildings are a place where educational concepts are put into practice which very much reflect the configuration, attitudes and needs of the specific neighbourhood. For this reason, they posit, educational practice in schools has not produced its own architecture expressing a pedagogical idea applying across multiple neighbourhoods or primarily founded in child and youth education processes.

The fact that a great deal is going on in this context can be seen from the fact that many school buildings are today being adapted to meet the needs of contemporary pedagogy. In her chapter on "Rethinking Educational Spaces in School Design", the American architect Laura H. Malinin describes current American approaches to pedagogically and architecturally pioneering school construction by identifying five topics currently influencing the design of educational spaces in the USA: equality, safety, community, creativity and empowerment.

In their piece "Schools as 3D Textbooks for Sustainability Education", the architects Marta Brkovic and Rosie Parnell (UK) offer a graphic demonstration of how school buildings can provide a framework for learning about sustainable development, describing the pedagogical ideas on which the architectural design of these buildings is based. They propose that sustainable schools are about far more than just their design, innovative building technology or other fittings which can be used for demonstration purposes and as tools for learning. More than this, they are about learning activities and fields of responsibility for pupils, and involving the local population.

The Labour government's investment programme in the education sector between 2009 and 2012 saw many British schools become prestigious projects by architects, politicians, school heads and sponsors. Prompted by this event, the chapter "The Struggle for Educational Space in the Programme 'Building Schools for the Future'" by the two British educational scientists Pat Mahony and Ian Hextall describes the intention, the political context and the implementation of the programme and presents some initial insights into the effect of these ambitious school buildings in a selection of city districts.

Education and the Neighbourhood

The second section, "Education and the Neighbourhood", is about local areas where there is a focus not only on school institutions and places of learning outside the school but also on their links to the immediate and extended neighbourhood.

In her chapter "The Interrelationship Between Education and Urban Development", urban planner Frauke Burgdorff describes the trends of the latest educational debate and the consequences it has had on urban and district development, with a particular emphasis on how important schools are for neighbourhoods. She comes to the conclusion that education is an important resource for urban development and renewal processes, and should thus be a consistent feature of urban development policy.

In their chapter "'Spielräume'—Beyond the Distinction Between Education and Urban Development" the social scientists Fabian Kessl and Christian Reutlinger present findings from academic research accompanying the programme SPIELRAUM, which involved designing or redesigning urban spaces where young people can be active. The facilitation supporting is used to derive six ideas for developing or extending "opportunities for urban action".

In her chapter on "Urban Poverty Areas and Education" the sociologist Alexandra Nonnenmacher works out the education-relevant parameters of urban neighbourhoods and their interdependencies on the macro, meso and micro levels. The chapter offers a comprehensive overview of quantitative empirical studies on this subject. Finally, some unanswered questions are raised and starting-points are identified for further research.

Under the headline "Schools as Components of the Inner Development of New Neighbourhoods", the architects Christina Simon-Philipp and Gerd Kuhn reveal how city planning approaches to the topic of education have changed over recent decades. Several innovative European examples are presented which draw a clear picture of how educational institutions and neighbourhoods can be shaped in an integrative manner. To sum up, the authors spotlight the conditions in which future projects can be made to succeed.

In his chapter "Appropriating Spaces as a Form of Urban Education", the social scientist Ulrich Deinet outlines how childhood and youth have changed over the last 40 years in terms of social spaces. The author focuses on the spaces which children and young people appropriate today, highlighting the greater importance of commercial spaces. Based on this, the concept of appropriation is adapted for use in the debate on education in the public arena.

In their chapter "The Neighbourhood as a Place of Learning for Young People", the architects Andrea Benze and Urs Walter discuss how games (such as simulation games) can help us understand, analyse and develop neighbourhoods as places of learning. They see learning as a multifaceted process: on one hand, learning is examined within and as emanating from the neighbourhood; on the other hand, the chapter explores the subject of negotiation on the future development of local spaces, viewed as a learning process.

The educational scientist Joana Lúcio (Portugal) bases her chapter on "Young People's Appropriations of Life and Education in the City" on concepts of identity and appropriation. Building upon this, the author presents results from her research project on young people's social learning experiences in the city.

In her chapter on "All-day Schooling in Educational Networks", the educational scientist Vicki Täubig outlines the development of neighbourhood *Ganztagsschulen*

and urban educational landscapes as parallel, related processes, analysing them as "success stories" from a neo-institutionalist point of view.

The urban planners Angela Million, Anna Juliane Heinrich and Christine Loth and the educationalists Thomas Coelen and Ivanka Somborski present their intermediate results from an interdisciplinary research project under the title "Educational Politics and Urban Design for Learning. Local Educational Landscapes in Policy and Practice". Based on their empirical study, the authors discuss common topics, shared and overlapping perceptions of problems, aims, programs, and implementation strategies at the point where education policy and urban development policy meet in Germany. In addition, socio-spatial educational landscapes are investigated in view of their constitutive elements and recurring spatial features.

Education and the City

The section "Education and the City" examines areas which touch upon contexts relevant to the city as a whole. It looks at the goals of urban policymaking and at municipal educational organisation and planning. Cities are described as constructed spaces in which children and young people live and learn. The potential of educational landscapes is reflected upon both as a theoretical model and in its practical implementation from the point of view of experts on education, social issues and planning.

In their piece "Educational Landscape Straddling Spaces and Education", the social scientists Petra Bollweg and Hans-Uwe Otto link the goals of policy on youth and education, theoretical considerations, models and reported experiences. The authors argue that educational landscapes should be thought through from the point of view of clients, and their topology based on the aspect of teaching within an urban space, so that urban areas can be described as spaces which provide opportunities (especially for disadvantaged children and young people), and discussion can focus on the dimensions of access, use and co-determination.

In his chapter on "Education in the City from the Perspective of Social Spaces", the educationalist Wolfgang Mack focuses on non-formal educational setting and informal educational processes, describing the respective views and sometimes differing interests of educational and urban policy.

In the chapter "Educational Landscapes Caught Between Individuals, Organisations and Municipalities", the social scientist Stephan Maykus develops a theoretical model favouring a change in educational management which encourages cooperation between individual educational organisations. The idea is to allow different target perspectives to be assessed, forming a conceptual basis for networked education.

In their chapter "Towards a Social Pedagogy of Urban Design" the educationalists Sven De Visscher and Hari Sacré (Belgium) investigate how childhood and pedagogy are viewed, and how these different views have guided and shaped urban design both past and present. This is then used to propose an approach to planning

and participation which includes children, as citizens, in processes of negotiation with regard to urban development.

In his chapter on “Educational Landscapes and the Reduction of Socio-spatial Educational Inequality in the City”, the social scientist and educationalist Thomas Olk deals with the question of whether, and in what conditions, strategies for a municipal educational landscape can help minimise urban segregation and social inequality.

To combat problematic situations, in many places there is now a focus on linked preventative measures coordinated by the municipality. With this in mind, sociologist Heinz-Jürgen Stolz explains in his chapter “Educational Work in the Municipality” how to achieve successful integrated city or city district development planning taking into account the selection effects of the school education system.

The chapter “Educational Planning and Urban Development in Munich”, by city school councillor Rainer Schweppe and administrative director Wolfgang Brehmer, is based on the latest municipal education report. In this case, the aim of guiding municipal education is to create greater educational equality. In view of this, there is a description of the steps taken by the city to create effective cross-departmental associations bearing joint responsibility for this subject.

In his chapter “Managing Educational Landscapes”, Lars Niemann addresses the challenges of putting local educational alliances into practice in terms of local urban development and architecture: he proposes that spatial and pedagogical issues need to be brought together and that appropriate control mechanisms are required to manage the developments in a targeted manner.

In their chapter “Regulatory Areas of Municipal Education Management on the ‘Learning Locally’ Programme”, the social and political scientists Markus Lindner, Sebastian Niedlich, Julia Klausing and Thomas Brüsemeister use governance research with the aim of revealing some fields of action and responsibility for municipalities, if integrated municipal educational management is to be developed locally.

Education and the Region

The final section, “Education and the Region”, offers a collection of chapters linking the topic of education to regional administrative spaces which are larger in scale than those for which individual municipalities are responsible.

In his chapter covering the essential points, entitled “Regionalization of Education”, social scientist and educationalist Marcus Emmerich looks into regionalisation research which takes a critical stance towards political programmes, examining empirical aspects and those related to social theory.

The chapter “The Relevance of Educational Landscapes for Regional and Urban Development”, by the social geographer Mario Tibussek, sets out the theory that the education system and city/regional development are mutually relevant. Based on this, a connection is made between the educational landscape approach and

urban/regional development strategies, with the governance perspective, interdisciplinarity and the spatial aspect being central points for discussion.

In her chapter "Regional Contexts in Quantitative Educational Sociology", the sociologist Alexandra Wicht analyses regionality in quantitative educational research. She develops theoretical requirements for taking regional contexts into account, at the same time revealing the difficulties involved in operationalisation.

In their chapter covering the basic principles of "Educational and Social Schools Research Related to Space", the educationalists Nils Berkemeyer, Björn Hermstein and Veronika Manitius provide a discerning overview of regionally based research on the number of pupils being sent to different school types and gaining qualifications. The significance of the spatial location of the school—especially regarding educational participation and success—is thus illustrated and given a place within the theory.

The chapter "Data-driven Planning and Regional Educational Management" by Axel Gehrmann, Sascha Pelzmann and Dominique Matthes sums up the reasons, intentions, difficulties and results of the increasing number of educational reports written since PISA was introduced, discussing their topics, the data on which they are based, participation and implementation.

The starting point for the chapter "Regionalization as a Justice-based Support Strategy for School Improvement" is decentralised attempts at reforming the education system. The educational researchers Veronika Manitius, Anja Jungermann and Wilfried Bos discuss the topic of regionalisation in education, starting out with the basics, in the light of social justice. Finally, they report on a survey on the subject held at regional education offices.

In their chapter "Organised After-school Activities at the Intersection Between Education and Municipalities in Rural Areas" the geographer and educationalist Holger Jahnke and the social scientist Katharina Hoffmann provide an impressive description of the dilemma confronting small communities under pressure to compete as their population continues to shrink. In this context, the importance of all-day activities is clearly revealed as an opportunity for communities to raise their profile, despite restrictions caused by responsibilities.

Outlook: Research into the Education System and Urban Development

The composition of the chapters clearly shows that there is already a rich vein of research engaging with the points of contact between the education system and urban development, though, from our point of view as editors, this does not yet sufficiently break down the borders between the disciplines. Among other things, this can be seen in the teams of researchers and authors, who rarely mix: when research is carried out into educational planning or pedagogical aspects, this is seldom combined with research into urban and regional planning or the

architectural and city planning aspects of school buildings or city districts (and vice versa). Only gradually is an understanding developing that there is a basic need to interweave urban and educational planning more intensively in theory, empirical work and practice, so as to meet new requirements arising from the changing role of the education system in an urban context. Most activities still take place parallel to one another, and in many places practice seems (so far) to be some steps ahead of empirical research.

Already in 2012 we editors had the chance to participate in an interdisciplinary studies day at TU Berlin (Berlin Institute of Technology) supported by the "Urban Spaces" Montag Foundation, joining up with 19 representatives from the fields of municipal planning and educational practice, spatial analysis, architecture and educational science to set out some needs with regard to empirical research in the context of education and urban development (cf. Uttke et al. 2013):

- Contexts and scales
  - Education in rural and urban areas
  - Education in growing or shrinking regions
- Settings and processes
  - Urban space as a non-formal educational setting
  - Educational transitions: biographical and spatial
  - Ascriptions and identities of social spaces
- Impacts and effects
  - Education as a pull factor
  - Education as a component of a resilient city
  - Added value of educational landscapes: management, cooperation, etc.
  - Municipal returns from successful education
  - Connections between educational level and functioning urban development
- Instruments and methods
  - Instruments at the point where the education system and urban development meet
  - Methods for researching into the effects of spaces in the field of education

The chapters in this volume shed light on how these and other research desiderata are being engaged with, and help us determine how some of these gaps in the research can start to be filled.

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Bibliography

Baumheier, U., & Warsewa, G. (2009). Vernetzte Bildungslandschaften: Internationale Erfahrungen und Stand der deutschen Entwicklung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 19–36). Wiesbaden: VS.

Biernath, A., Heußen, E., Ahnfeldt, B., von Kalben, T., Luchterhandt, D., & Burgdorff, F. (Eds.). (2009). *Die Rolle der Bildung in der Nationalen Stadtentwicklungspolitik*. Berlin: Drei Thesen.

BJK—Bundesjugendkuratorium, Sachverständigenkommission für den elften Kinder- und Jugendbericht & AGJ—Arbeitsgemeinschaft für Jugendhilfe (Eds.), (2002). *Bildung ist mehr als Schule. Leipziger Thesen zur aktuellen Bildungspoltischen Debatte.* miz.org/artikel/BA_035_Leipziger_These_zur_bildungspolitischen_%20Debatte_2002.pdf. Accessed 6 Aug 2013.

BJK—Bundesjugendkuratorium. (Ed.). (2001). *Zukunftsfähigkeit sichern! Für ein neues Verhältnis von Bildung und Jugendhilfe. Eine Streitschrift des BJK.* Berlin. http://www.bundesjugendkuratorium.de/pdf/1999-2002/bjk_2001_stellungnahme_zukunfts-faehigkeit_sichern.pdf. Accessed 10 Sept 2014.

Bleckmann, P., & Durdel, A. (Eds.). (2009). *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen*. Wiesbaden: VS.

BMBF—Bundesministerium für Bildung und Forschung. (Ed.). (2004). *Konzeptionelle Grundlagen für einen Nationalen BildungsberichtvNon-formale und informelle Bildung im Kindes- und Jugendalter.* Berlin.

BMFSFJ—Bundesministerium für Familie, Senioren, Frauen und Jugend. (Ed.). (2005). *Zwölfter Kinder- und Jugendbericht. Bericht über die Lebenssituation junger Menschen und die Leistungen der Kinderund Jugendhilfe in Deutschland*. Berlin.

BMVBS—Bundesministerium für Verkehr, Bau und Stadtentwicklung. (Ed.). (2007). *Leipzig Charta zur nachhaltigen europäischen Stadt*. http://www.bmvbs.de/cae/serv-let/contentblob/34480/publicationFile/518/leipzig-charta-zur-nachhaltigen-europaeischenstadt-angenommen-am-24-mai-2007.pdf. Accessed 10 Sept 2014.

BMVBS—Bundesministerium für Verkehr, Bau und Stadtentwicklung. (Ed.). (2009). *Bildung in der nationalen Stadtentwicklungspolitik. Die zentralen Forschungsleitfragen und die Antworten aus den Projekten*. Berlin, Hamburg, Cologne/Bonn, Stuttgart. http://www.nationalestadtentwicklungspolitik.de/cln_030/nn_251550/Content/__Anlagen/bildung__leitfragen,templateId=raw,property=publicationFile.pdf/bildung_leitfragen.pdf. Accessed 10 Sept 2014.

Bundestransferstelle Soziale Stadt im Auftrag des BMVBS. (Ed.). (2006). *Dritte bundesweite Befragung Programmgebiete "Soziale Stadt". Endbericht zur Auswertung*. Berlin: BMVBS.

Burgdorff, F., & Herrmann-Lobreyer, M. (2010). Bildung im Rahmen der Nationalen Stadtentwicklungspolitik. Ausgangssituation, erste Projekte und ein gemeinsames Thesenpapier. *Informationen zur Raumentwicklung, 2*(3), 143–154.

Coelen, T., & Stecher, L. (Eds.). (2013). *Die Ganztagsschule. Eine Einführung*. Weinheim, Basel: BeltzJuventa.

Deinet, U., & Icking, M. (2011). Jugendarbeit als Brücke zu Bildung im öffentlichen Raum. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 71–85). Wiesbaden: VS.

Deutscher Städtetag. (2007). *Aachener Erklärung des Deutschen Städtetages anlässlich des Kongresses "Bildung in der Stadt" am 22/23 November 2007*. Cologne. http://www.staedtetag.de/imperia/md/content/pressedien/2007/17.pdf. Accessed 10 Sept 2014.

Difu—Deutsches Institut für Urbanistik gGmbH. (Ed.) (2012). Website "Soziale Stadt". http://www.sozialestadt.de/programm/. Accessed 10 September 2014.

Difu—Deutsches Institut für Urbanistik gGmbH & Wüstenrot Stiftung (Eds.), (2010). *Infrastruktur und Stadtentwicklung. Technische und soziale Infrastrukturen – Herausforderungen und Handlungsoptionen für Infrastruktur- und Stadtplanung*. Berlin.

Emmerich, M. (2010). Regionalisierung und Schulentwicklung. Bildungsregionen als Modernisierungsansätze im Bildungssektor. In: A. Altrichter & K. Maag Merki (Eds.), *Neue Steuerung im Schulsystem: Ein Handbuch* (pp. 355–375). Wiesbaden: VS.

Harring, M. (2010). Freizeit, Bildung und Peers – informelle Bildungsprozesse im Kontext heterogener Freizeitwelten und Peer-Interaktionen Jugendlicher. In M. Harring, C. Rohlfs, C. Palentien & O. Böhm-Kasper (Eds.), *Freundschaften, Cliquen und Jugendkulturen. Peers als Sozialisations- und Bildungsinstanzen* (pp. 21–59). Wiesbaden: VS.

Hebborn, K. (2008). Städtische Bildungspolitik. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 958–967). Wiesbaden: VS.

Institut für Entwicklungsplanung und Strukturforschung GmbH. (Ed.). (2005). *Schule im Stadtteil. Fallstudie im Rahmen der Evaluation des integrierten Handlungsprogramms "Soziale Stadt NRW"*. Hanover.

Kessl, F., & Reutlinger, C. (2012). Urbane Spielräume: Bildung und Stadtentwicklung – Einleitung. In F. Kessl & C. Reutlinger (Eds.), *Urbane Spielräume. Bildung und Stadtentwicklung* (pp. 7–16). Wiesbaden: VS.

Leimkühler, R., & Schöne, S. (2012). Die Schlüsselrolle der Kommunen bei der Entwicklung lokaler Bildungslandschaften – zentrale Herausforderungen und notwendige Rahmenbedingungen. In P. Bleckmann & V. Schmidt (Eds.), *Bildungslandschaften. Mehr Chancen für alle* (pp. 245–259). Wiesbaden: VS.

Löw, M. (2001). *Raumsoziologie*. Frankfurt am Main: Suhrkamp.

Mack, W. (2009). Bildung in sozialräumlicher Perspektive. Das Konzept Bildungslandschaften. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 57–66). Wiesbaden: VS.

Olk, T. (2008). Kommunale Bildungsplanung. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 949–957). Wiesbaden: VS.

Otto, H.-U., & Oelkers, J. (2006). *Zeitgemäße Bildung. Herausforderung für Erziehungswissenschaft und Bildungspolitik*. Munich: Reinhardt.

Otto, H.-U., & Rauschenbach, T. (Eds.). (2004). *Die andere Seite der Bildung. Zum Verhältnis von formellen und informellen Bildungsprozessen*. Wiesbaden: VS.

Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode, 34*(3), 380–404.

Prölß, R. (Ed.). (2003). *Bildung ist mehr! Die Bedeutung der verschiedenen Lernorte: Konsequenzen aus der PISA-Studie zur Gestaltung der Jugendhilfe in einer kommunalen Bildungslandschaft*. Nuremberg: emwe.

Reutlinger, C. (2009). Raumdeutungen. Rekonstruktion des Sozialraums "Schule" und mitagierende Erforschung "unsichtbarer Bewältigungskarten" als methodische Felder von Sozialraumforschung. In U. Deinet (Ed.), *Methodenbuch Sozialraum* (pp. 17–32). Wiesbaden: VS.

Reutlinger, C. (2011). Bildungsorte, Bildungsräume und Bildungslandschaften im Spiegel von Ungleichheit – Kritischer Blick auf das "Räumeln" im Bildungsdiskurs. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 51–69). Wiesbaden: VS.

Simon-Philipp, C. (2010). Stadt und Bildung. In R. Danielzyk, F. Pesch, H. Sahnen & S. Trommer (Eds.), *Perspektive Stadt* (pp. 155–168). Essen.

Uttke, A., Niemann, L., Heinrich, A. J., Burgdorff, F., & Coelen, T. (2013). Studientag Stadt und Bildung: in Wissenschaft und Praxis. Dokumentation. Berlin. Online publication: http://www.paedagogische-architektur.de/projekte/bildung-und-stadt.html

Vogel, P. (2008). Bildung, Lernen, Erziehung, Sozialisation. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 118–127). Wiesbaden: VS.

Weiß, W. W. (2011). *Kommunale Bildungslandschaften. Chancen, Risiken und Perspektiven*. Weinheim: Juventa.

Part I
Schools and the Neighbourhood

Reflections on the Relationship Between Schools and the City

Otto Seydel

Abstract Otto Seydel analyses possible interfaces between the city and the school from the point of view of the pedagogy of schools. In his chapter, he distinguishes between four levels on which cooperation may take place: (1) school rooms are accessible for users from the district outside of school hours; (2) the school becomes an all-day community centre with various institutions based directly within the school, with their own rooms; (3) "experts" from the district come into lessons; (4) institutions within the community are proactively used as places where the schoolchildren can learn. In the first two cases, certain conditions must be fulfilled regarding the school building to reduce the detrimental effect of friction between the systems. To advance from mere spatial proximity to something of educational value for all those involved (from an additive to an integrative relationship), what is also needed is reliable network structures.

Keywords Community education · Community school · District school · Educational conference · Cooperation · Network · Open school · Community youth work · Formal learning · Informal learning

"Welcome to jail!" read the words on a large, red banner in front of the gateway to the Herman-Hesse-Gymnasium high school in Berlin. After the autumn holidays (2000), several activists from the children's rights group K.R.Ä.T.Z.Ä. were demonstrating in front of the entrances to some Berlin schools. They were handing out leaflets designed to show the structural similarities between schools and prisons, from the strictly controlled daily schedule and "surveillance of people's private business" to the "barren, gloomy" architecture and compulsory schooling as a "day release" system. The protest was 14 years ago. Today, the topic is becoming a suitable theme for talk shows, if under other headings: the philosopher Precht (2013), in his book

O. Seydel (✉)
Institut für Schulentwicklung, In den alten Gärten 15,
88662 Überlingen, Germany
e-mail: otto.seydel@t-online.de
URL: http://www.schulentwicklung-net.de

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about "Anna", the director Wagenhofer (2013), in his film "Alphabet", and the neural researcher Gerald Hüther (undated), in his lectures, have brought the fundamental criticism of the school as an institution up to date.

This is not the place to hold the necessary debate on the basic principles of whether the German school system, in its current form, is still fit for the twenty-first century. In the medium term, at least, millions of euros are likely to be spent continuing to renovate and sometimes even build school buildings in Germany. However, it is this provocative comparison with a prison which leads to the key issue raised in this chapter: how is it possible, at least, to keep the school gates open? The comparison made by K.R.Ä.T.Z.Ä. suggests that it is a physically and socially hermetically sealed system. Certainly, in the past, there have been ways of looking at schools which might suggest a parallel of this kind: the school as a cocoon, as a carefully prepared "pedagogical suburb", on the sidelines, with borders that are mainly sealed off. In the Western world, schools have doubtless also always been a kind of safety net, ensuring that children and young people do not come to harm, or cause any harm, while their parents are at work all day. The strong link between compulsory schooling and supervisory duties in Germany are a clear sign of this. Over recent decades, however, this image has fundamentally changed.

Proposition 10 of the Montag Foundations' handbook on the basics of "School planning and building" (2011, p. 64ff.) says: "The school opens up to the city—the city opens up to the school". In many German schools the gates now deliberately remain open—at least at certain times, and sometimes for long periods of time. Pupils go out and come back in; external experts are welcome to visit for specific projects. The older the pupils are, the more frequently they cross the threshold. Back in 1971, in his programme "Deschooling Society", a critical discourse on civilisation, Illich (2013) even called for the barrier to schooling which the city itself erects to be raised entirely. However, in Germany at least, this radical concept remains a utopia.

Instead, Riekmann (2014), a former head of the German Schools Award-winning "Max Brauer Schule" (Hamburg), describes the touch point between the school and the district as a "cell membrane" which lets through some substances, but not others. This selective permeability is, however, what keeps the independent, yet dependent, cell alive. Different qualities and quantities of matter flow in either direction.

The Gateway Is Open into the School

Let us begin by describing permeability from outside into the school. This permeability can be observed in all kinds of functional contexts. For this reason, when terms such as "educational landscape", "district school", "community education" etc. are used, it is important to check what kind of context is meant.

Version 1: shared use

The first case involves opening up the school building to users from outside the school: sports clubs, music schools, children's art academies, and so on. School pupils being able to take part in the activities they offer is just a side effect, if, ideally, a useful one. The main point, before anything else, is the economic synergy gained from shared use. Rooms which were once left empty during the afternoon or evening are given an additional use. After all, classrooms are usually only used by the school between 7 a.m. and 5 p.m., five days a week during the school term. Often they are used for far less time. When they can be put to use by other partners during the evening, at weekends and in the school holidays, this can save a great deal of money from the public purse. The side-effect (school pupils taking part) can, however, also be planned to deliberately raise the school's profile. The school then becomes a real cultural "magnet", creating an energy which, in turn, spreads into the school day in many ways, for example if the assembly hall (or the foyer, with additional furnishings) is turned into a public theatre stage, a forum for discussion on municipal policy, a presentation area for art exhibitions, and much more.

Below is a list of the most common types of cooperative venture found in Germany (see Table 1). This is not a definitive list, as in principle there are no limits—and no individual school will open up its rooms at random to all these partners: the kinds of cooperation vary depending on the school profile and surrounding environment.

Here, mention should also be made of purposefully planned, immediate "neighbourhoods", ranging from the "school on the roof" of a shopping centre (providing space to build a school in a city-centre location with few available plots, such as the Bundesrealgymnasium an der Au, Innsbruck) to an old folks' centre (enabling the generations to come together, e.g. at the Geschwister-Scholl-Stadtteilschule, Hamburg).

Version 2: the school as a community centre; the community centre as a school

In the second case, several institutions from outside the school move into their own rooms within the school, or at least in the direct neighbourhood (or the school moves in with them). This applies not only to town libraries (of which there are plenty of examples in Germany) but also to all kinds of social and cultural institutions which are of great importance both for the children and young people as they grow up and for the community as a whole, without themselves being part of the school. The Netherlands provide some examples of this model: "At the […] Brede School (in the Dutch municipality of Vaals—author's note) the primary school is at the heart of a network of day-care and advice services for parents and children aged 0 to 12. There are a good 500 schools of this kind (in the Netherlands—author's note), and every year the figure rises… For this reason, the extensive building complex also includes, for example, the town library, the public health department, the Green Cross and the youth welfare services, as well as the Vaals Foundation for child and youth art education, etc. Close contact between day-care providers and teachers, and the proximity to social institutions providing support when problems arise are designed

to provide the best possible forms of care and education for children. Their parents also benefit from having just one place to go for the school, day-care and visiting doctors […]. In the Netherlands, the Green Cross is responsible for medical care for pre-schoolers and schoolchildren; as it also provides residential care for senior citizens, the Vaals concept in fact includes an intergenerational centre" (Tyroller 2006).

Spatial Requirements for Opening up the School

For versions 1 and 2 to take place—shared use and the school as a community centre—certain spatial conditions need to be met at the point where the school and public use come together. This is the only way for the "membrane" to maintain the right balance of permeability, with no "clogging" or "holes" appearing.

- Accessible areas separated into those for public use, on one hand, and for school use, on the other. (The schoolchildren's main base, with sensitive school teaching materials and children's work, needs to be able to stay out of bounds.)
- Access to sanitary facilities from public areas
- Lockers in the public areas
- Separate heating and electricity circuits (with their own fuse boxes) for public rooms used in the evening or during the holidays
- Sufficient number of parking spaces within reach
- Signage outside and inside the school
- School playground secured at night

With an eye to public acceptance, another element which should not be forgotten is the school's appearance in terms of architecture and attractiveness, e.g. an inviting entrance, outward transparency. A "prison effect" would indeed not be of benefit.

Table 1 School partnerships in Germany

Part of school building	Shared user
Sports facilities	Sports club
Assembly hall/foyer	Various performances, presentations, exhibitions
Library	Community library
School playground/play equipment	Neighbourhood
Cafeteria	Neighbourhood
Classrooms and special-purpose rooms	Evening school, lessons for parents, language courses
Administration areas	Municipal advice offices
Common rooms	Youth association
Music rooms/assembly hall	Music school
…	…

Source Own representation

Version 3: external experts from the district in lessons

This version does not have a spatial effect. Here, the emphasis is on immediate pedagogical use for school pupils. It is about people from the city district (and beyond), from "real life", being invited to the school for specific purposes to take part in certain lessons or temporary projects as discussion partners, experts, fellow learners or reviewers: politicians coming to panel discussions, beekeepers coming for a project on bees, actors judging the reading competition, etc.

The Gateway Is Open out of the School

The "cell membrane" is selectively permeable in both directions. In modern schools, the gateway is open for schoolchildren to leave it for limited periods of time.

Version 4: educational landscape

The term currently used for Version 4 is that of an "educational landscape", of which the school is a part, along with other institutions. However, this term means more than just an alliance of different institutions which come together to agree on the focuses of their work. Deliberately opening up the school to the outside world actively connects pupils with other lifeworlds, preparing them for transitions which come later, when they leave school. As long ago as the 1980s there was intense discussion about the Anglo-American concept of the community school (cf. Zimmer and Niggemeyer 1992; Buhren 1997), then frequently linked to far-reaching political visions of being able to balance out social disadvantages directly through school structures. The political, moral charge of this concept has today largely settled down. Instead, the introduction of *Ganztagsschulen*, which offer extracurricular educational activities, extending the German school day, has given new meaning to extracurricular areas. After all, it would be expecting too much of schools (or schools would be overestimating their own abilities) and would cause a problem if schools offering all-day activities were expected (or wanted) to take over all the fields which were once available for children more or less to pick and choose during the afternoon.

A community school is thus about more than a trip to a nearby museum or the shared use of facilities, e.g. those at a neighbouring sports club or public swimming pool. It is about specific experiences of active contact with other areas of social and cultural life. Two examples:

Example 1 for years, the Baumschulenweg primary school in Bremen has been carrying out a series of projects in its playground in the middle of the city: the "chicken class" take care of a little chicken run; the "bee class" look after an apiary with three swarms, and the "herb class" tend a kitchen garden. In itself nothing unusual. There are plenty of versions of this type of project. The difference in our context is that on Saturdays, the children put up a little stand at the adjacent weekly

market, where they sell their honey, eggs and herbs. The primary schoolers learn far more than just applied mathematics when they count their earnings; they learn a great deal that is not on the curriculum, but is important for life.

Example 2 Schule Schloss Salem (cf. Seydel 1995), upper secondary course in philosophy, Year 12 (German system). A lesson is taking place on the reasonings behind ethical systems; hedonism versus deontology, with a presentation by the teacher, a worksheet and discussion. The conversation strays to levels of abstraction which only the class's three non-stop talkers can follow. Suddenly, there is a beep at a desk near the window. One of the schoolchildren jumps up, grabs the beeper lying on the desk and rushes out of the classroom. A door slams in the neighbouring classroom, too. Shortly afterwards, the sirens of the school fire brigade start to wail. Later, at lunch in the boarding school's dining hall, there is a report: this time it was "just" a 500 m-long oil leak on the B31 near the spot where drinking water comes from Lake Constance; they secured the area along with the Überling fire service.

A school having its own fire brigade which is part of the local fire services is surely the exception in Germany. The first example, too, is in some ways an ideal situation. Other examples of schoolchildren actively taking part in municipal life were collected during the "Democratic Action" competition (2014). Behind these examples lies the principle that a school only earns the title "community school" if schoolchildren can gain their own experience, in the school context, of coming into contact with other areas of social and cultural life. Such occasions are not a one-off flash in the pan, but are a permanent part of the school curriculum. In order for them to gain this experience, the "pedagogical encircling of childhood" which threatens to go hand in hand with the widespread introduction of the *Ganztagsschule*, especially, needs to be put to an end (cf. Lindenberg 2013). The aim is active, responsible participation in community life with far-reaching consequences. This calls for stepping stones leading children out of the school (see Table 2).

Other collections of examples of specific cooperative projects can be found, among other things, in publications by the Deutsche Kinder- und Jugendstiftung (2007); Landesinstitut für Lehrerbildung und Schulentwicklung Hamburg (2007); city district cooperation: nelecom (undated). The partners a school works with should be built up carefully depending on its profile to ensure that the cooperation results in more than just a brief encounter.

Challenges and Barriers for Cooperation

Opening doors, paving the way and bringing actors physically close does not in itself produce cooperation. In a block of flats, people may live cheek by jowl, but remain anonymous, with no relationship to one another. The lists compiled here are as yet no more than the rows of buzzers by the door of a block of flats.

The same applies to schools: an evening school using the school building in the evening often has as little to do with the school itself as a shift worker using the

"hot bed" system of the nineteenth century, where night workers would pay tenants to use their bed during the day when they did not need it, to make up for the high cost of rent. It is only when shared interests are found, and shared rules and rituals allow partners to act together, following an aim, that a shared physical space becomes a social space.

What barriers can hamper or even prevent cooperation between the school and partners outside the school, and what bridges can make it easier? To begin with, it must be said that frictional losses are inevitable, even ignoring unfavourable technical or spatial aspects (if there is no clear definition of the borders between public and non-public spaces) and ignoring communication barriers (lack of consultation, last-minute changes to requirements, etc.). Even ignoring these self-generated communication barriers, competition and conflicts of use appear normal considering the way social systems develop of their own accord.

- Different goals. Experience with school centres, which are specifically designed to be cooperative institutions, shows that a shared site does not by any means automatically lead to cooperation between the schools sharing the site (or even a building), even though the goals, habits, professions etc. inherent to a school centre are relatively similar. When, for example, a school and a youth centre are direct neighbours, their goals, habits and professions are often fundamentally different. With qualifications in mind, the school aims to convey a specific content in a planned manner, and is very generally focused on selection. How successful their education is can be measured by a comparative marking system.

Table 2 Stepping stones into an educational landscape

Buildings in the neighbourhood	Shared users from the school
Sports facilities	Sports lessons, working groups
Municipal hall/community centre	School council
Library	Research, reading tasks
Public park	Playground for breaks
Snack stand	Snacks during breaks
Workshops and industrial plants	Work experience
Social institutions	Work experience
Youth association	After-school activities
Music school	Instrument practice, concerts
Museum	Art or history projects
Cinema	German or history projects
Theatre	German or history projects
Zoo	Biology project
Red Cross, relief organisation	School first-aiders, etc.
Church/Room of Peace	Meditation etc.
Municipal forest	Biology/tending plants
…	…

Source Own representation, based on Schneider (2014)

Schools are largely driven by formal learning processes. The youth centre focuses primarily on the young people themselves, their interests and individual potential for development; by no means on comparative assessment (except, at most, in playful competition). Community youth work is largely shaped by informal learning processes (cf. Deinet and Icking 2013).

- Natural borders. A social system takes on a lasting form when it defines its borders. This is done by means of rituals and rules, and—if there is a territorial attachment—by delimiting spaces. The habits formed by groups of schoolchildren in "their" class means that they "take possession of" their classroom in a different way, for example, to the staircases. This typically comes to light when there is conflict about orderliness. Errors made by "insiders" are tolerated in a different way to those made by "outsiders". If your own group at school leaves their room messy or dirty, this raises a ruckus, but not usually as bad a ruckus as if the user who left it in chaos is from outside the school. This applies both on a small scale, to a class, and to the school as a whole.
- Lack of time and resources. Educational institutions, at school or elsewhere, always run the risk of eating up staff members' time like a black hole. Educational processes are never-ending (except, for example, at the end of the school year, and even then it is usually only temporarily). Some things always stay open-ended, both in terms of relationships and on a factual level. In schools in difficult situations, especially, the school's core business always demands a great deal of energy from teachers and other staff. In this light, spontaneous resistance to extra demands arising from the city district take on an appearance of legitimate self-defence.

Conditions for Success

Readers might now come to the conclusion that, apart from the savings made on initial investment and running costs, opening up the school to the city district for educational purposes and sharing the use of a school building mainly produces friction and only little educational synergy, if any. And indeed, this lack of productivity does sometimes occur. Yet there are proven examples of productive relationships between the city and the school, in which the above difficulties are overcome or never appear in the first place. Three important conditions for success are:

- Resilient communication structures are set up within the city district; routines for regular two-way exchange of information, crisis management, joint planning and careful consideration of future steps. To this end, a network needs to be created in the city district linking the groups of actors involved (cf. Bertelsmann 2006). Generally, the education conference (or similar system) which this entails needs a "caretaker" to ensure that information is exchanged. This might be the school director, or some other actor within or outside the school.

- A district education conference does not in itself make a community school. As well as the "caretaker" for the network in the city district as a whole, there are individual "border-crossers" moving between the institutions: a teacher or member of the pedagogical staff who, for example, is a member of the Red Cross and comes in and out of the Red Cross centre, will be able to keep up the school first-aiders' connection with the world outside the school in a very different way to when the office is only organised internally.
- Cooperative requirements should not be too great a burden. One partner should not be expected to solve the other partner's key problems: there are clearly defined shared interests, but they fall within certain limits. This is necessary to create a real win-win situation for all involved: the sports association using the hall extends its programme to include the after-school activities. The drama educationalist taking up some of the German teacher's responsibilities on a project gets a stage in the community centre, etc.
- The relationship between the partners is eye to eye, despite any objective differences, and each shows clear respect for the other's task. A "subtenancy contract" emphasising one side's dependency, is not of benefit. The work carried out by the social pedagogues at the next-door youth centre is different to that done by the Maths teacher, but just as valuable. From the point of view of the social pedagogue, the school should not be stylised as the enemy, even reading "between the lines". Otherwise this wastes the opportunities which lie in the two institutions' spatial proximity.

Outlook

There is a great deal of speculation about the future of schools in the Internet Age, revolving around the key phrase "delocalising education". If the speculation behind this phrase turned out to be true, this would indeed have considerable effects on the relationship between the school and the city district. One thing is true: the basic blueprint for old-school lessons (and with it our image of the rooms in a school building) was developed at a time when there were no computers or televisions, no Wikipedia or YouTube. After their parents, children's teachers were the second key to the worlds outside their direct field of experience. That changed radically with the advent of the modern media. The school (and church) have lost their erstwhile monopoly on explaining the world. The computer industry is promising that the world's knowledge will soon even be available on your wrist, in the form of an iWatch, or in front of your eyes, with Google Glass. It is true that the new media bring with them a fundamental change in the role of the teacher. Teachers will never be able to achieve the perfect stage-management of television films or computer simulations. But it is probably wrong to assert that this will render the school, as a real place, superfluous in the foreseeable future. After all, the more perfect virtual worlds become, the more important the example set by the teacher in person in selecting from and interpreting those worlds. Information provided on the Internet

is not enough on its own: it needs instructions to understand it. The new media may make it possible for schoolchildren to have important experiences, but they are, after all, only secondary, not primary experiences: coming face to face with people and things in person. These encounters are necessary for—if the term can be permitted—"real" education. This is especially the case if, in the near future, modern media and e-learning leads to the partial delocalisation of education processes, to a far greater extent than is currently imaginable. There are already signs of a process of this kind taking place today at American universities, and it is likely to reach German schools, too, in the not-too-distant future. However, real physical spaces for face-to-face encounters with people and objects will (necessarily) continue to exist in future. The younger that children and adolescents are, the more they need a defined, specific place where they can feel at home. And whose gateways are sometimes closed.

Bibliography

Bertelsmann, S. (2006). *Regionale Bildungslandschaften*. http://www.bertelsmann-stiftung.de/cps/rde/xchg/SID-70785FAF-CEE9FE18/bst/hs.xsl/35066.htm. Accessed 25 Feb 2014.

Buhren, C. G. (1997). *Community Education*. Münster, New York, Munich, Berlin: Waxmann.

Deinet, U., & Icking, M. (2013). Offene Jugendarbeit und Ganztagsschule. In U. Deinet & B. Sturzenhecker (Eds.), *Handbuch Offene Kinder- und Jugendarbeit* (pp. 389–400). Heidelberg, New York: Springer.

Demokratisch Handeln. (2014). http://www.demokratisch-handeln.de/. Accessed 25 Feb 2014.

Deutsche Kinder- und Jugendstiftung. (2007). *Über den Schulhof Hinaus* ... http://www.ganztaegig-lernen.de/media/web/download/doku05-netz.pdf. Accessed 25 Feb 2014.

Hüther, G. (undated). http://www.gerald-huether.de/initiativen/index.html. Accessed 25 February 2014.

Illich, I. (2013). *Entschulung der Gesellschaft*. Eine Streitschrift. 6th edition (1st edition, 1971, entitled Deschooling Society. New York: Harper & Row). Munich: Verlag C. H. Beck.

K.R.Ä.T.Z.Ä. (2000). http://kraetzae.de/schule/willkommen_im_knast/flugblatt/. Accessed 23 Feb 2014.

Landesinstitut für Lehrerbildung und Schulentwicklung Hamburg. (2007). *Stadtteilkooperation*. http://li.hamburg.de/contentblob/2833992/data/pdf-kooperation-von-schulen-im-stadtteil.pdf. Accessed 25 Feb 2014.

Lindenberg, M. (2013). *Umstellte oder gestützte Kindheit? Überlegungen zur staatlichen Verregelung der Kindheit mit Hinweisen aus dem 14. Kinder- und Jugendbericht*. http://www.rauheshaus.de/fileadmin/user_upload/downloads/Rauheshaus/131124_Vortrag_Die_umstellte_Kindheit.pdf. Accessed 25 Feb 2014.

Montag Stiftungen Jugend und Gesellschaft I Urbane Räume. (Eds.), (2011). *Schulen planen und bauen. Grundlagen und Prozesse.* Berlin: Jovis.

nelecom (undated). www.begleitprogramm.nelecom.de. Accessed 25 Feb 2014.

Precht, D. (2013). *Anna, die Schule und der liebe Gott*. Goldmann: Der Verrat des Bildungssystems an unseren Kindern. Munich.

Riekmann, B. (2014). *Fachgespräch der Montag Stiftung "SCHULE UND STADTTEIL"*, 21 Feb 2014, Geschwister-Scholl-Stadtteilschule. Hamburg.

Schneider, J. (2014). *Fachgespräch der Montag Stiftung "SCHULE UND STADTTEIL"*, 21 Feb 2014, Geschwister-Scholl-Stadtteilschule. Hamburg

Seydel, O. (1995). *Zum Lernen herausfordern. Das reformpädagogische Modell Salem*. Stuttgart: Klett-Cotta.

Tyroller, S. (2006). *Das Bildungssystem der Niederlande*. https://www.uni-muenster.de/NiederlandeNet/nl-wissen/bildungforschung/vertiefung/bildungforschung/bredeschool.html. Accessed 23 Feb 2014.

Wagenhofer, E. (2013). *Alphabet - Angst oder Liebe?* Cologne: Pandora Filmverleih.

Zimmer, J., & Niggemeyer, E. (1992). *Macht die Schule auf, laßt das Leben rein. Von der Schule zur Nachbarschaftsschule*. Beltz: Weinheim.

Schools and Education as Part of the 'Social City' Programme

Christa Böhme and Thomas Franke

Abstract In the areas covered by the "Social City" programme, many households face considerable socio-economic and social problems. As a result, an above-average number of children here show wings of educational deficits, and local educational establishments have to make up for this with childraising measures to a greater extent than in other city districts. Whereas the topic of schools and education initially played only a secondary role in the implementation of the "Social City" urban development funding programme, today the task of supporting schools' role as places of education and integration has come to the fore. Today, among other things, the aim is to complement formal school education by providing a series of informal educational opportunities in the living environment of the district, as well as creating a regional network between the actors involved (or which should be involved): nursery schools, schools, child and youth work institutions, pupils and parents, companies, relevant departments at the municipal authorities.

Keywords "Social City" programme · Disadvantaged city districts/neighbourhoods · Segregation · Educational inequality · Schools · Local educational associations · Educational landscapes · Neighbourhood development

Since the 1990s, many cities—not only in Germany—have shown a tendency towards increasing segregation (e.g. cf. Häußermann 2000 and in the following: BMVBS 2008, p. 9ff.). This was and is mainly triggered by economic and political restructuring processes, which can be summed up briefly as globalisation, de-industrialisation, the growing significance of information technology and knowledge-based service industries, and deregulation. The consequence of this

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C. Böhme (✉) · T. Franke
Urban Development, Legal and Social Division, German Institute of Urban Affairs (Difu), Zimmerstr. 13-15, 10969 Berlin, Germany
e-mail: boehme@difu.de

T. Franke
e-mail: franke@difu.de

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structural change include, among other things, greater a growing division of society regarding access to the labour market and employment, income, patterns of consumption and lifestyles (Franke et al. 2000, p. 244ff.). Spatially, these developments are reflected in the increasing fragmentation of the city, caused by the housing market, leading individual residential areas to grow or fall in value (cf. Häußermann 2000, p. 16). The spaces which "lose out" from this economic and state restructuring sometimes then develop into places of social exclusion, cut off from the processes which affect society at large and the city as a whole. They are generally characterised by a mixture of complex, interlinked problems, which may include (cf. Franke et al. 2000, p. 247f.):

- problems with built environment and environmental problems: falling behind on modernisation and maintenance, high building density, housing and living space shortages, lack of green areas and open space, noise and air pollution;
- problems with the infrastructure: insufficient social and technological infrastructure, inadequate leisure facilities (especially for children and young people);
- problems with the local economy: a deterioration in the quantity and quality of commercial provisions (retailers, services), a lack of local jobs and traineeships;
- socio-economic problems: long-term unemployment, dependency on state benefits, poverty combined with a low level of education and health problems;
- problems in the neighbourhood: a concentration of disadvantaged households (with a high percentage of people of immigrant origin), more affluent households moving out, a lack of community spirit, tensions caused by different sections of the populace living together; social conflicts, a low level of initiative among residents, a lack of prospects, drug and alcohol abuse, vandalism and criminality;
- image problems/a negative image.

In view of these complex, interlinked sets of problems both in the developed, social and natural environment and in the field of individual living circumstances, in 1999 a federal and state programme was launched: "City neighbourhoods with special development needs—Social City". In 2011 this was extended into the programme "The Social City—Investment in the Neighbourhood", focussing on the increased involvement of "third parties" such as educational institutions. The aim of the new approach was, and remains, to leave behind the insufficient attempts at solving problems within individual sectors. Instead an integrative, spatially based method of developing disadvantaged city districts is been tried out, thus not only stopping the "downwards spiral" in the neighbourhoods but also extensively improving living conditions in situ, in the wider sense of the local environment.

The core elements of the programme are spatial orientation, resource bundling (both material and as in expertise), the activation and participation of actors within and outside politics and administration, as well as network-oriented management both on the administrative level and at the coalface, plus vertically between these

two areas (neighbourhood management) (e.g. cf. BMVBS 2008, p. 18ff.; Franke et al. 2013, p. 195ff.).

To What Extent Do the Effects of Background Play a Role in the Emergence of Educational Inequality in Disadvantaged Districts?

With regard to the topic of schools and education as part of the "Social City" programme, special emphasis falls on the finding that poverty, combined with a low educational status, is a central problem in disadvantaged neighbourhoods (see also Nonnenmacher in this volume). A study by the Hans Böckler Foundation on social inequalities in education within and outside the school, based on Boudon (1974), differentiates between the primary and secondary effects of children's backgrounds on educational inequality: "We speak of the primary effects of background when the unequal levels of scholastic attainment among children from different social origins are the cause of educational inequality in their later life" (Hans-Böckler-Stiftung 2009, p. 21). This involves habitual patterns of decision-making, thought, speech and behaviour which "are formed due to their belonging to a certain social group" (ibid.), such as the questions of whether children are read to at home, whether they get help doing their homework, etc. "Secondary effects of background, by contrast, explain why there are differences in educational decision-making between children from different social origins even though their school performances are the same" (ibid.). For example, a tendency can be observed for children from worse-off circumstances less frequently being advised to attend a Gymnasium (upper-level secondary school) than those from a better-off family environment, even when their performance is good enough. For many parents, too, their decision on the future course of their children's education depends considerably on their social status. Decisions on access to education have already been made at the point when it is decided whether a child will attend pre-schooling or not (ibid., p. 23f.).

In the areas covered by the "Social City" programme, many households face considerable socio-economic and social problems. Parents are frequently overwhelmed by their childraising tasks. Altogether, "Social City" areas are background conditions for primary and secondary effects. Among other things, one result is that an above-average number of children and young people in these areas have insufficient linguistic abilities, only attend Hauptschule (the lowest secondary level), frequently play truant or even stop attending school. In many households, there is a regrettably lacking level of educational socialisation, and many parents cannot offer "catch-up" strategies such as paid remedial teaching because of their low incomes. Finally, parents who are at the end of their tether are mostly only

capable of taking an active part in school life, or prepared to do so, to a very limited extent (attending parents' evening, etc.).

What Challenges Do Schools in Disadvantaged Neighbourhoods Face?

In disadvantaged districts, especially, the point must thus be to enable, or re-enable parents to accompany their children on their way through school in an active, supportive manner, as part of the overriding aims of the "Social City" programme, as well as to improve local living conditions and thus the conditions for a successful educational career. It is also becoming clear that, in disadvantaged neighbourhoods more than in other districts, the state and the municipality (in the form of childcare institutions, schools, the youth welfare services etc.) needs to compensate for aspects of childraising which are not (cannot be) undertaken by parents. Here, schools take on a key function. In view of these challenges, they should extend their understanding of themselves as places where knowledge is conveyed to schoolchildren, turning it into a model of an open place of learning related to the neighbourhood, both physically and in terms of the expertise and target groups involved (cf. BMVBS 2008, p. 42f.). This may include:

- Extending the range of services offered by the school both spatially and in terms of content, in cooperation with other actors; this may include redesigning the school playground, setting up schoolchildren's cafés, providing language courses, sports and cultural activities, promoting good health and preventing violence and criminality;
- Cooperating with actors involved in neighbourhood development: neighbourhood management, companies (e.g. local companies), municipal administration services (especially the youth welfare office and LEA), the police etc.;
- Organising interchanges between the school and local traders in the form of vocational preparation placements;
- Involving the school more intensively in neighbourhood networks: using the multiplier effect of the school e.g. to get through to parents, and thus a large part of the local neighbourhood populace;
- Developing the school into a neighbourhood centre for communication and interaction.

Altogether, the point is thus to complement formal school education with numerous relatively informal educational opportunities in children's lifeworlds "on the doorstep" and "extending into the city", or to bring these two aspects into accord with one another. Furthermore, the actors and institutions involved (children's daycare centres and schools; facilities working with children and young people; schoolchildren and their parents; companies or relevant municipal administration departments), need to be more closely interlinked on a regional basis.

When Implementing the Programme, What Role Does School and Education Play as a Field of Action?

The field of school and education initially played a minor role in the implementation of the "Social City" urban development funding programme; at first, it tended to be seen from the technical point of view of infrastructure provision (cf. Bauministerkonferenz 2005). Over time, however, greater priority was laid on socially integrative fields of action, as shown, for example, by the results of the German programme evaluation in 2004 (cf. BBR 2004). Among other things, greater attention was paid to possible ways to "strengthen schools as places of education and integration" in which "children and young people from different social and ethnic backgrounds come together, learn together and live together" (Bauministerkonferenz 2005, p. 8). Some evaluations on the federal state level also confirmed that education was long associated solely with the institution of the school, with less focus, for example, on transitions from kindergarten to school to working life (cf. BMVBS 2008, p. 41f.). All in all, the spectrum of innovative approaches in the field of education only slowly gathered steam: even in 2005 it was still said that "The question has still not been settled of how such projects can become the rule and 'teach a lesson'" (cf. Difu 2005, p. 6). Recently, however, the topic of the "educational landscape" (*Bildungslandschaft*) has gained considerable momentum within the Social City project, as seen, for instance, from the following example from practice, the "Reuterkiez Local Education Association" in the Berlin borough of Neukölln.

Example from Practice: Reuterkiez Local Education Association in Neukölln, Berlin

The "Reuterkiez Local Education Association" (Lokaler Bildungsverbund Reuterkiez) improves educational opportunities and promotes the integration of children and young people in the Reuterplatz district of the Berlin borough of Neukölln. The district schools involved are mainly attended by children and young people from low-income households with little connection to education and with immigrant origins; poor preconditions for development and a lack of language skills restrict their educational opportunities. To find some ways of solving this problem, in 2002 the structural condition of the schools was improved. In 2005 the implemented program "Making the school local" fostered cooperation with parents, language teaching, vocational guidance, the prevention of violence, promoting health, and leisure activities at the schools. One key element was the model project "Intercultural Facilitation", which involved bilingual social workers mediating between the school, teachers, parents and pupils. This scheme was the initial spark behind the "Reuterkiez Local Education Association", founded in 2007 as a combination of all the area's educational establishments, migrants' associations and

parental initiatives and involving the local neighbourhood management, the borough administrative office and the relevant Berlin senate departments (cf. BMVBS & BBSR 2009, p. 35).

Where Might This Journey Lead?

The programme "Social City—Investment in the Neighbourhood", which has continued to be developed since 2011, declares one of its main focuses to be on "improving infrastructure designed to suit children, families, old people and other social groups". Combined with the intentions laid out in the current national coalition agreement for the 18th parliamentary term—to give the programme an added boost, focusing on various aspects of integration, among other things—this means the foundations are laid for further extending schools and education as a field of action in the context of the Social City, to achieve a wide spectrum of related aims:

- Improving schoolchildren's educational outcomes,
- Improving schoolchildren's factual knowledge, their linguistic, social and intercultural skills and their sense of personal responsibility,
- Implementing the UN Convention on the Rights of Persons with Disabilities (inclusion),
- Extending educational work in the living environment of a neighbourhood,
- Helping improve parents' childraising skills and ability to provide support,
- Improving and introducing qualifications for transitions from daycare institutions to school(s) then to training and work,
- Building up the school(s) to be the spatial and thematic heart of the district.

Bibliography

Bauministerkonferenz – Konferenz der für Städtebau, Bau- und Wohnungswesen zuständigen Minister und Senatoren der Länder, ARGEBAU (2005). *Leitfaden zur Ausgestaltung der Gemeinschaftsinitiative "Soziale Stadt"* (3rd edition).

BBR – Bundesamt für Bauwesen und Raumordnung im Auftrag des Bundesministeriums für Verkehr, Bau- und Wohnungswesen (ed.) (2004). *Die Soziale Stadt. Ergebnisse der Zwischenevaluierung. Bewertung des Bund-Länder-Programms "Stadtteile mit besonderem Entwicklungsbedarf – die soziale Stadt" nach vier Jahren Programmlaufzeit*. Berlin. Processing: IfS Institut für Stadtforschung und Strukturpolitik GmbH (R. Aehnelt, H. Häußermann, W. Jaedicke, M. Kahl, & K. Toepel).

BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (ed.) (2008). *Statusbericht 2008 zum Programm Soziale Stadt*. Berlin (Processing: Bundestransferstelle Soziale Stadt, Deutsches Institut für Urbanistik: C. Böhme, T. Franke, W.-C. Strauss, & K.-D. Beißwenger).

BMVBS & BBSR – Bundesministerium für Verkehr, Bau und Stadtentwicklung/Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (eds.) (2009). *Jubiläumskongress 10 Jahre Soziale Stadt – Das Bund-Länder-Programm in der*

Praxis. Berlin. (Revised edition: Bundestransferstelle Soziale Stadt, Deutsches Institut für Urbanistik: T. Franke, W.-C. Strauss, C. Böhme, & P. Diekelmann).

Boudon, R. (1974). *Education, opportunity, and social inequality. Changing prospects in Western Society*. New York: Wiley-Interscience.

Difu – Deutsches Institut für Urbanistik im Auftrag des Bundesministeriums für Verkehr, Bau und Stadtentwicklung (BMVBS), represented by the Bundesamt für Bauwesen und Raumordnung (BBR) (ed.) (2005). *Fachtagung Bildung im Stadtteil. Dokumentation.* Berlin (Working papers on the "Social City" programme, vol. 11).

Franke, T., Löhr, R.-P., & Sander, R. (2000). Soziale Stadt – Stadterneuerungspolitik als Stadtpolitikerneuerung. *Archiv für Kommunalwissenschaften*. II. Halbjahresband. Berlin, 243–268.

Franke, T., Nelle, A. B., Böhme, C., & Strauss, W.-C. (2013). Soziale Stadt und Stadtumbau. In K. Kummer, J. Frankenberger, & T. Kötter (Eds.), *Das deutsche Vermessungs- und Geoinformationswesen 2014* (pp. 191–238). Berlin, Offenbach: Wichmann.

Häußermann, H. (2000). Die Krise der "sozialen Stadt". *Aus Politik und Zeitgeschichte, 1*, 13–21.

Hans-Böckler-Stiftung (ed.) (2009). *Soziale Ungleichheiten in schulischer und außerschulischer Bildung. Stand der Forschung und Forschungsbedarf.* Düsseldorf.

Neighbourhood-Based School Strategies for Education and Integration

Günter Warsewa

Abstract At the point where urban research meets educational research, it is seen as crucially necessary for full-service community schools to be linked to their spatial, social and institutional environment in order for the school system to fulfil its tasks more efficiently. In the developing local educational networks, what is needed is to turn a set of hierarchical bureaucratic relationships between actors with a low level of cooperation into a functioning socio-spatial network for education, childcare and childraising. Based on a comparison of six empirical case studies, the chapter explains how opening up the inner and outer borders of the institution of the school comes up against structural problems and resistance. To make full use of the integrative potential of the full-service community school (*Ganztagsschule*) and its cooperation and links with partners outside the school, additional small-scale, cooperative coordination and management work is required which can only usefully be organised on a municipal level. For this reason, and especially in view of the particular problems affecting towns and cities, there seems to be a need for more municipal ability and responsibility for ensuring that institutional arrangements function.

Keywords Local educational networks · Dissolution of school boundaries · Institutional change · Social integration · Municipal school policy

Despite years of debate, the basic functional problems of the German school system still have not been overcome: the demands and expectations regarding the school as an institution, on the one hand, and the extent and quality of services provided, on the other, seem to be drifting further apart. In the course of these developments, massive pressure has built up for the school system to adapt, leading to various experiments aimed at increasing its efficiency: internal reforms, such as a move away from fixed teaching timetables; pupils spending longer times together before

G. Warsewa (✉)
Institute Labour and Economy, University of Bremen,
Universitätsallee 22, 28359 Bremen, Germany
e-mail: gwarsewa@iaw.uni-bremen.de

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being streamed into different school types; schools' autonomy being extended. Notwithstanding these changes, the school has remained primarily a state institution whose activities are managed and regulated by political, legal and official aims, and are subject to internal administrative evaluation and testing (Füssel and Leschinsky 2008; Fend 2008). Nonetheless, there are signs of an increase in joint activities with state institutions and foundations, new kinds of public-private partnerships and vigorous attempts to encourage more efficient cooperation between different public institutions.[1]

The most effective way of modernising the school system could be based on introducing and extending the *Ganztagsschule*, a German extended or full-service school—as long as the spread of this school type is used to encourage the dissolution of boundaries in the school system; opening up the institution of the school to its social environment and increasing mutual communication. The removal of boundaries is understood as a process of modernisation, aiming to overcome traditional barriers in three ways. In functional terms, the school is given additional tasks of integration, child care and childraising alongside its traditional purpose of education. In social terms, the exclusive pupil-teacher relationship is complemented by additional relationships of cooperation and exchange with teachers, neighbours and various experts. In institutional terms, new vertical and horizontal cooperation and links are required.

Whether the networks created during the dissolution of school boundaries are known as municipal educational landscapes, local communities of shared responsibility or educational hubs, they raise the bar when it comes to small-scale, cooperative coordination and management, pointing to a need for greater municipal responsibility for the functioning of the institutional arrangement as a whole. This chapter will investigate that thesis, considering the particularly difficult set of problems facing towns and cities.

The Schools' Function Within the District

Cities, especially, tend to amass the kinds of problems which schools are confronted with, and which entail modern, sometimes contradictory requirements for small-scale city policy and design.

On one hand the aim is to meet the growing needs of highly qualified workers regarding the quality and availability of utilities, leisure and education, and thus of kindergartens and schools; on the other, the rising number of women in work means it is becoming important for city infrastructures to take the pressure off families' and

[1]The following descriptions are based on the BMBF-funded project "Stadtteilbezogene Vernetzung von Ganztagsschulen" (Neighbourhood-based *Ganztagsschule* network) in which the author was involved along with U. Baumheier and C. Fortmann. The report was published with the title "Ganztagsschulen in lokalen Bildungsnetzwerken" (*Ganztagsschulen* in local education networks; Baumheier et al. 2013).

households' schedules (Läpple et al. 2010, p. 35ff.). Accordingly, a "good school" is increasingly expected to offer an attractive range of extended activities and childcare during the afternoon. Among other things, families are choosing where to live based on whether they can find a school of this kind for their children within a reasonable distance. The quality of local education and childcare therefore depends to a great extent on the reputation and attractiveness of the district, making high-quality educational provisions an important pull factor not only for the municipality as a whole (Eichert 2007) but also for each individual district.

On the other hand, the school is increasingly being assigned the task of carrying out integration work with groups in danger of exclusion; work which is not (or no longer) done by other institutions. In some parts of town there are concentrations of poor areas and workers in the precarious jobs typical of the urban, post-Fordist "menial economy" (Läpple et al. 2010, p. 39), for whom work and the labour market, the neighbourhood and the family play little role in their social integration. The spatial structure of the city and the image of individual neighbourhoods are increasingly being shaped by people's religion and immigrant or ethnic origins, as well as the distributory effects of the housing market and policy, entrenched unemployment and the development of a new urban underclass.

In this context the school plays a major role in the occurrence of disadvantage caused by where children live. As we know since PISA, the education that children gain and their success at school are more strongly linked to their social background in Germany than elsewhere. And "social background" does not just mean they belong to a certain milieu, social stratum or ethnic group, but also whether they come from a certain living area. The disadvantages of living in the "wrong place" are exacerbated by the school system, as increasing school segregation is a factor in the erosion of social ties and changes to how educational opportunities are distributed, as well as encouraging a vicious downwards spiral in some residential districts. Empirical educational research shows that educational disadvantages are aggravated by the mechanisms through which children are selected for schools (cf. Gesemann 2009, p. 454ff.; Helbig 2009; Strohmeier 2006; Weishaupt 1996). Moreover, catchment area boundaries and the fact that school authorities allow parents to send their children to school outside their catchment area encourages the separation of children from different social milieus even in primary school (Radtke 2004). As a result, at schools in neighbourhoods where 40–50 % of residents are migrants, 70–80 % of pupils are migrants, i.e. the social segregation effects at the school, or caused by it, are far higher than cities' *residential* segregation (BMVBS 2010). Schools in the areas affected are unable to cope with what are usually multiple social problems, meaning that where children live has a considerable effect on their educational opportunities.

School development policy, school profiling and the way parents choose a school often interact: some schools focus on working with middle-class children while others are allotted the task of working with children from underprivileged milieus. Which school takes on which role depends less on pedagogical quality and more on the social composition of the living environment, the boundaries of the

school catchment area and the configuration of neighbouring kindergartens and primary/secondary schools. For children whose parents lack the economic, social or cultural capital to effectively influence their child's educational career, these factors act as a formidable obstacle separating them from the more promising combinations of schools in their city (Radtke 2004, p. 172).

Can Neighbourhood Networks Solve the Problem?

The same is true of the school system as for all institutions: those contributing to people's plight could (and should) also do something to deal with the problems. However, the German school system seems to have considerable difficulty with an understanding of its task that takes personal development and social integration just as seriously as conventional educational goals. Thus, schools have often stood on the margins of many processes of renewal and revitalisation carried out within social spaces. In the context of urban/neighbourhood development, schools have also long "been seen almost entirely in terms of the space they can provide" (IfS and ForStaR 2004, p. 161), ignoring their functioning as institutions and social locations. For example, during the first stage of the federal programme "The Social City" (see also Böhme and Franke in this volume), at least, there were only rarely any signs of the neighbourhood management team approaching the school as a sphere of action (Walther 2002).

There are various signs that this is changing as the *Ganztagsschule* becomes more widespread. This is the only type of school which mobilises resources in the shape of time, staff, funding and skills of the kind needed to meet new and additional demands. The adjustments this involves nonetheless require considerable efforts whose success depends in many ways on the support of regional and municipal policy (IfS and ForStaR 2004, p. 162ff.). The increasing importance attached to educational and childcare infrastructure in towns and cities has thus meant for some time that municipalities are bearing greater responsibility not only for schools' equipment but also for their social function (Deutscher Städtetag 2007).

Dissolution of Functional Boundaries

Although, in recent years, the significance of regional school networks for quality development has been proven (Berkemeyer et al. 2008), in practice these networks come in all kinds of different shapes. A comparison of the cooperation networks of *Ganztagsschulen* in urban districts featuring widely differing social structures reveals that the type, number and intensity of cooperative ventures follow the segregative tendencies described above. While roughly two thirds of partner-based activities at schools in well-off districts were aimed at extending everyday school

life by adding attractive afternoon activities (see Fig. 1, right-hand diagram), ventures at schools in disadvantaged neighbourhoods were far more likely to be aimed at linking the school with community work (see Fig. 1, left-hand diagram). In these better-off areas, a wide range of ventures are also "just" bilateral, additive activities which involve "the school" concentrating on "core" school activities, on the one hand, while, on the other, paying for certain "services" without harmonising their content or concepts. While the partners cooperating in these areas put a great deal of thought into whether the extra work required for this cooperation is actually worthwhile, schools in disadvantaged neighbourhoods (e.g. in the Ruhr area) have sometimes been involved in some kind of district network for decades, as this is the only possible way to combat the problems there. Work on district committees and an examination of the environment in which the pupils and their parents live inevitably lead to the dissolution of boundaries between the school and its surroundings "as you simply realise that you cannot stand up to it on your own" (representative of a school in a disadvantaged part of Dortmund).

As well as individually reinforcing their position by providing a wider programme of better-quality education and care, the school can also develop further by networking with other actors in the district, becoming a centre for the district's social infrastructure. The school grounds and buildings can also be used out of school hours by other institutions or by residents. This does not necessarily mean that all social schemes should be concentrated at the school; rather, the school and its partners should, ideally, agree upon which location is best suited to reaching out to each target group. In this respect, schools can become "crystallisation and information points for local networks around education and care" (Läpple and Stohr 2006).

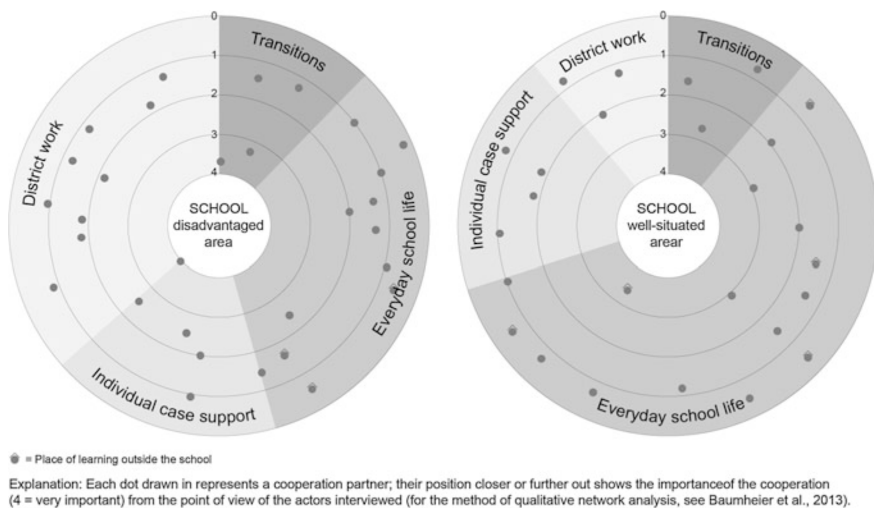

Fig. 1 Areas of cooperation between schools and their partners in disadvantaged and well-off neighbourhoods (*Source* own representation)

The Dissolution of Social Boundaries

In many residential urban districts, primary schools, in particular, are the only social infrastructure still jointly used by large swathes of the population. To that extent, "the school" as an institution and a social location can encourage people from different social milieus to meet and communicate. In places where there is an accumulation of social problems, especially, events and educational or cultural activities for children, families and other district residents play a significant part in revivifying and enhancing the status of these districts; in mobilising people's potential to help themselves and support one another; in a nutshell, in developing social capital. Consequently, schools have an important function for the development of a community within the district, for strengthening social ties, for creating the prerequisites for individual social and spatial mobility, and for how the district is viewed by outsiders. The means by which schools serve this function may involve either supporting "functional" segregation and counteracting "structural" segregation, or vice versa (Häußermann and Siebel 2002).

It cannot be assumed that all schools are prepared for active integration in the district's social processes, and there are contradictory findings on schools' actual participation in district networks. A survey of head teachers held as part of the study on the development of the *Ganztagsschule* (StEG) showed that when there is a district committee, the majority of schools participate (Arnoldt 2007, p. 101). However, a case study designed to evaluate the "Social City" programme in the federal state North Rhine-Westphalia shows that schools' participation is viewed very differently by the actors involved. In the districts studied, though 84 % of schools agreed that there was a basic attitude of cooperation among the district's schools, just under half of the other actors surveyed were of the same opinion (Olejniczak and Schaarschmidt 2005, p. 146).

Even in places where, as part of the *Ganztagsschule* concept, district networking and the involvement of parents and neighbours are being driven forward in a deliberate, committed manner, widely different effects can be seen. The differences between the *Ganztagsschulen* in disadvantaged and better-off residential areas, as revealed in Fig. 1, are largely down to the widely differing roles played by parents in these set-ups.

In schools in disadvantaged districts, it is assumed that children's scholastic success can be ensured by, for example, language support, improving their social skills and working on conflict prevention, and that this success will increase when the schoolchildren's parents or family can be involved in those measures. As a rule, the use of additional, combined resources is mainly employed to deal with deficits in each target group. The situation at *Ganztagsschulen* in better-off neighbourhoods is entirely different: here, it is in no small measure the wishes and demands of middle-class parents which determine how many and what kind of additional activities are employed, and the parents are often also involved in financing particularly attractive activities.

At the level of individual schools or locations, one rarely comes across this development of systematically divergent profiles; for this reason it seems appropriate to make neighbourhood-related cooperation and networking activities part of a wide-ranging city planning policy. In this context, development incentives and decisions on the allocation of equipment and funding can be applied in the form of positive discrimination, at least partly compensating for the structural disadvantages of certain school locations.

The Dissolution of Institutional Boundaries

Apart from anything else, issues relating to equipment and funding determine in no small part the quality of vertical cooperation between actors at the managerial level of the organisations involved. While, in many cases, genuine progress is being made in coordination and communication in actual practice "on the ground", a large number of political, legal and financial barriers stand in the way of close correlation between institutional strategies, aims and approaches.

Today, schools' opening up to their surroundings and cooperation with partners outside the school have been set down in educational legislation in most federal states (Behr-Heintze and Lipski 2004). However, both the schools authorities and politics primarily evaluate the quality of schools based on how well they fulfil their "core tasks", such as how well pupils perform in comparative studies. As this quality standard is also set by relevant regional authorities and largely ignores how schools relate to their social spaces, many schools do not see participation in local networks as their primary task. Their lack of local ties is thus seen as a cause of their sometimes difficult interaction: "The schools are something like the Vatican in Rome. They have extraterritorial status […]. The school belongs to the municipality, but what happens there is extraterritorial: it is run by the federal state" (Representative of a "Ganztägig Lernen" [All-day learning] service agency in an interview).

Other major obstacles to intensive, trusting, effective cooperation and coordination are due to data protection regulations which make it harder for schools and their partners to exchange information as required. Moreover, there is generally a structural imbalance between the schools and their partners, as the schools' political weight, market power and relative financial strength mean they can achieve the goals they are pursuing through the cooperation more frequently than their partners. Finally, there are many complaints that there is not enough coordinative capacity available of the kind which is essential to create functioning, resilient cooperative relationships between different institutions and professions (Baumheier and Warsewa 2009, p. 30). During the setting-up and stabilisation stage, at least, it thus seems necessary to establish the function of professional network management on the ground.

Conclusion

The advancing development of the *Ganztagsschule* is creating the preconditions for neighbourhood-based school improvement concentrating on social spaces, with cooperation and networking with various other actors in the district being the main means of promoting social integration and better educational outcomes. However, this potential is far from being fully exploited: often, joint activities on the level of a specific school location are overly dependent on the personal dedication of individuals: there is frequently a lack of commitment, reliability and professional coordination when it comes to cooperation between the school and its partners. Moreover, in view of the structural dominance of the school in the cooperative relationships, it is by no means self-evident for joint activities to be carried out on an equal footing.

Nonetheless, among the problems with cooperation, there are also initial glimpses of how they might be resolved. Alongside the professionalisation of horizontal district cooperation, the chances are changing for the better of the *Ganztagsschule* undergoing promising improvement through consistent vertical cooperation between district actors and those at higher, political and administrative levels. Both the previous sets of social problems and the coordination problems involved in overcoming them cumulate at the level of the municipalities, called upon to manage the cooperation in the resulting multi-level system, and to integrate individual educational networks into a socially levelling overall strategy. In this respect, the process so far of developing local educational networks shows, above all, that the municipal level should play a more extensive and active role in the development and running of the German school system than it has until now. If the municipalities were more involved in schools policy and design, this would, after all, lead to them taking on greater political responsibility and gaining expertise in structuring this field.

Bibliography

Arnoldt, B. (2007). Öffnung von Ganztagsschule. In H. G. Holtappels, E. Klieme, T. Rauschenbach, & L. Stecher (Eds.), *Ganztagsschule in Deutschland. Ergebnisse der Ausgangserhebung der 'Studie zur Entwicklung von Ganztagsschulen' (StEG)* (pp. 86–106). Weinheim, Munich: Juventa.

Baumheier, U., Fortmann, C., & Warsewa, G. (2013). *Ganztagsschulen in lokalen Bildungs- und Integrationsnetzwerken*. Educational Governance (Vol. 19). Wiesbaden: VS.

Baumheier, U., & Warsewa, G. (2009). Vernetzte Bildungslandschaften: Internationale Erfahrungen und Stand der deutschen Entwicklung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 19–36). Wiesbaden: VS.

Behr-Heintze, A., & Lipski, J. (2004). *Schule und soziale Netzwerke. Schlussbericht*. Munich: Deutsches Jugendinstitut.

Berkemeyer, N., Manitius, V., Müthing, K., & Bos, W. (2008). Innovation durch Netzwerkarbeit? Entwurf eines theoretischen Rahmenmodells zur Analyse von schulischen Innovationsnetzwerken. *Zeitschrift für Soziologie der Erziehung und Sozialisation, 28*(4), 411–428.

BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung. (2010). *Migration/Integration und Stadtteilpolitik – Städtebauliche Strategien und Handlungsansätze zur Förderung der Integration*. BMVBS Online Publication No. 08/2010.

Deutscher Städtetag. (2007). *Aachener Erklärung anlässlich des Kongresses "Bildung in der Stadt" am 22./23.11.2007*. http://ec.europa.eu/education/migration/germany9_de.pdf. Accessed August 19, 2010.

Eichert, C. (2007). Bildung als Standortfaktor. In C. Solzbacher & D. Minderop (eds.), *Bildungsnetzwerke und Regionale Bildungslandschaften. Ziele und Konzepte, Aufgaben und Prozesse* (pp. 14–22). Munich, Unterschleißheim: Luchterhand.

Fend, H. (2008). *Schule Gestalten: Systemsteuerung, Schulentwicklung und Unterrichtsqualität*. Wiesbaden: VS.

Füssel, H. P., & Leschinsky, A. (2008). Der institutionelle Rahmen des Bildungswesens. In K. S. Cortina, J. Baumert, A. Leschinsky, K. U. Mayer, & L. Trommer (Eds.), *Das Bildungswesen in der Bundesrepublik Deutschland* (pp. 131–203). Reinbek: Rowohlt.

Gesemann, F. (2009). Kommunale Bildungspolitik – Schlüssel zur Integration von Migranten? In F. Gesemann & R. Roth (Eds.), *Lokale Integrationspolitik in der Einwanderungsgesellschaft. Migration und Integration als Herausforderung von Kommunen* (pp. 449–468). Wiesbaden: VS.

Häußermann, H., & Siebel, W. (2002). Die Mühen der Differenzierung. In M. Löw (Ed.), *Differenzierungen des Städtischen* (pp. 29–67). Opladen: Leske & Budrich.

Helbig, M. (2009). *Andere Bundesländer, andere Aussichten: Der Wohnort ist mit entscheidend für Bildungschancen.* WZBrief Bildung 8/2009. Berlin.

IfS – Institut für Stadtforschung und Strukturpolitik & ForStaR – Forschungsinstitut Stadt und Region. (2004). *Evaluation der Programme "Wohnen in Nachbarschaften – WiN" und "Stadtteile mit besonderem Entwicklungsbedarf – die Soziale Stadt" in Bremen.* Anhang zum Endbericht. http://www.sozialestadt.de/gebiete/gebietAnzeige.php?id=134. Accessed August 23, 2010.

Läpple, D., Mückenberger, U., & Ossenbrügge, J. (2010). *Zeiten und Räume der Stadt. Theorie und Praxis*. Budrich: Opladen & Farmington Hills.

Läpple, D., & Stohr, H. (2006). Arbeits- und Lebenswelten im Umbruch – Herausforderungen für die Entwicklung sozialer Infrastrukturen in Stadtquartieren. *Sozialwissenschaften und Berufspraxis, 29*(2), 173–191.

Olejniczak, C., & Schaarschmidt, M. (2005). *Schule im Stadtteil. Fallstudie im Rahmen der Evaluation des integrierten Handlungsprogramms "Soziale Stadt NRW"*. IES Report 2005. Institut für Entwicklungsplanung und Strukturforschung GmbH at the University of Hannover. Hannover, Essen.

Radtke, F. O. (2004). Die Illusion der meritokratischen Schule. Lokale Konstellationen der Produktion von Ungleichheit im Erziehungssystem. In K. J. Bade & M. Bommes (Eds.), *Migration – Integration – Bildung. Grundfragen und Problembereiche*. IMIS-Beiträge 23, Institut für Migrationsforschung und Interkulturelle Studien (IMIS) (pp. 143–178). University of Osnabrück.

Strohmeier, K. P. (with the help of Safet Alic). (2006). *Segregation in den Städten*. Bonn: Friedrich-Ebert-Stiftung.

Walther, U.-J. (2002). Ambitionen und Ambivalenzen eines Programms. Die Soziale Stadt zwischen alten Herausforderungen und neuen Lösungen. In U.-J. Walther (Ed.), *Soziale Stadt – Zwischenbilanzen* (pp. 23–44). Opladen: Leske & Budrich.

Weishaupt, H. (1996). Untersuchung zum Stand der Alphabetisierung und Elementarbildung in der Bundesrepublik Deutschland 1994. In K. Meisel & M. Tröster (Eds.), *DIE Materialien zur Erwachsenenbildung 7. Alphabetisierung, Elementarbildung: Stand und Perspektiven* (pp. 34–58). Frankfurt a.M.

Spatial Traces of Pedagogical Constructions of Meaning Over the Course of Urban Change

Jeanette Böhme and Viktoria Flasche

Abstract Ongoing research shows by example that although educational concepts are being developed in schools, these are adapted to extremely district-specific situations, directions and needs. This phenomenon also takes material form in school architecture: they reproduce sections of architecture from the functional buildings in the neighbourhood which enjoyed a central position at the time they were built, but which have lost their significance over time due to urban change. For this reason, educational practice in schools has not produced its own architecture expressing a pedagogical idea which applies across multiple neighbourhoods or is primarily founded in child and youth education processes. Instead, as an educational component of the city, the school prefers merely to reproduce the situations (e.g. crises) going on in the school's site, which in itself is a sign of its need for professionalisation.

Keywords School architecture · School space · School neighbourhood · Educational meaning · Urban change

Studies from the research into school culture show that each individual school produces specific pedagogical constructions of meaning (e.g. cf. Böhme 2000; Helsper and Böhme 2000; Helsper et al. 2001). One point worth underlining is that neither teachers' professional self-concepts nor school reforms are of great relevance for the pedagogical direction taken in a school culture (cf. Rutter et al. as far back as 1980). Instead, this piece shows that the schools' specific constructions of pedagogical meaning come from circumstances, needs and focuses specific to the quarter, which take material form within the school to great effect.

J. Böhme (✉) · V. Flasche
Faculty of Educational Sciences, Department of Pedagogy,
University of Duisburg-Essen, Berliner Platz 6–8, 45127 Essen, Germany
e-mail: jeanette.boehme@uni-due.de

V. Flasche
e-mail: viktoria.flasche@uni-due.de

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The Issue of Pedagogical Meaning Within Schools in the (Post-)Modern Age

Gaining acceptance for a pedagogical construction of meaning to encourage a sense of community is risky in many ways. Firstly, one of the principal problems of justifying pedagogical meaning is that only time shows whether or not practice based on an idea will prove worthwhile (cf. Helsper et al. 2003). It is all the more difficult as the future form of social circumstances and individual educational processes cannot be foreseen. In the here and now, we can only make claims and predictions about whether pedagogical constructions of meaning will stand the test of time. Secondly, there is a basic technological deficit in educational science (cf. Luhmann 1988). Though pedagogical constructions of meaning can be used as the basis for educational planning, educational processes elude any overall guiding influence and are thus fundamentally inaccessible. Educational science is simply not a technology; it is a professionalism oriented to practical aspects of everyday life which, when creating practices, always has to consider the contingencies involved. Thirdly, pedagogical practice is aimed at fulfilling plans, and is thus normative by nature. Any attempt to create social consensus on the normative implications of pedagogical constructions of meaning is counteracted by the multiple norms and values of the modern age. These are becoming more diversified both in functional terms, e.g. depending on economic, political, religious, legal or familial systems, and in socio-cultural terms, depending on the differences between milieus, and are becoming individualised in the form of lifestyles.

The start of the pedagogical search for meaning can be pinned down to the point when religious patterns of justification lost their position as a culturally unifying central focus. This is not to say that, in the past, religious explanations of pedagogical issues laid to rest all controversy about steps to be taken in practice. However, producing and negotiating pedagogical constructions of meaning now involves a wider range of conditions. Universally applicable foundations for justifying whether something makes pedagogical sense have thus been crushed by educational science, both in terms of its anthropological reference to the imageless image of human beings (cf. Zirfas 2004) and in its disenthralled shift away from society's belief in progress (cf. Krüger 1990) in the modern and post-modern eras. Accordingly, in this disillusioned modern age, schools face the challenge of themselves creating a meaning-making focus from their everyday practice and firmly establishing its claim to validity.

We start out from the fundamental morphological assumption made by Halbwachs (1938/2002) that such meaning-constructing processes, which involve a great deal of tension, leave their mark on spaces, preserving material evidence of the social meaning they produce. These material imprints favour a certain range of transformations when it comes tot he cultural shape of the school and the quarter (cf. Hartle 2006). In the following, the traces left behind in a classroom are reconstructed as examples of the loss of a religious nucleus and to the establishment of new meaning-making connections in a neighbourhood.

Religion, Fordism, Sport: Schools Construct Meaning as the Urban Situation of the Neighbourhood Changes

School buildings are topographical elements of the settlement structures of neighbourhoods and regions, and are subject to a specific kind of urban change. The school neighbourhood selected is in the Ruhr area. Since the closure of first the ore extraction and then the coal mining pits, and the collapse of the steel industry, which set the pace in the area, the region has undergone a complex structural change which can be described formulistically and depicted as an ideal type as the transformation from mining to the metropolis (cf. Lichtenberger 1998, p. 308ff; Fassmann 1993).

Transformations to the School Neighbourhood's Meaning-Making Central Focus

The infrastructural transformation of this school region is reconstructed by contrasting maps from the years 1890, 1930 and 1970. This reveals that the clearly defined, concentric forms of the towns are increasingly blurred by infrastructural links (see also Häußermann et al. 2008). Vogelpohl (2008) describes this process as the fragmentation of urban spaces to produce a "city of neighbourhoods" (ibid., p. 80f). Thus, as the administrative unit of the individual town has lost its boundaries in the Ruhr, we specify the school's location as a neighbourhood (cf. Schnur 2008, p. 41) and analyse its transformation over the region's urban change based on that.

Fig. 1 Drawing of the mediaeval town centre (*Source* © Neumann and Wagner (1984): Gelsenkirchen. Düsseldorf)

Fig. 2 Traces of the *star-shaped* settlement structure in the school neighbourhood, with the old site of the church at its centre, 2014 (*Source* © AG Raumwissenschaftliche Schul- und Bildungsforschung; modified version: ©2014 Google AeroWest 2014)

The selected school location is a neighbourhood in the old part of a medium-sized[1] Ruhr town. The history of this neighbourhood's foundation goes back to the early Middle Ages, when the growth of a settlement resulted in the building of a church in the 11th century (cf. Neumann and Wagner 1984, p. 71; see Fig. 1). Spatial traces of this population group's dominant metaphysical, religious stance manifest themselves in maps of the town, which reveal an infrastructural concentration radiating from a centre marking the spot where the church once stood (see Fig. 2, white lines) (cf. Neumann and Wagner 1984). The diversification of the settlement structure started out concentrically from this church, developing until the start of the 19th century into a star shape with a centre and a periphery (cf. Schroer 2006, p. 227ff).

When the first coal was discovered in 1843, the local industrialisation process began. The establishment of Fordist patterns of order caused a topological transformation of the infrastructure. The star shape of the school neighbourhood was overwritten by flowing lines, or a linear infrastructure: thanks to the building of

[1]*Mittelstadt*, i.e. a town with a population of 20,000–100,000.

Fig. 3 Settlement structure of the urban zone in 1890 (*Source* © AG Raumwissenschaftliche Schul- und Bildungsforschung)

tracks for rail transport (see Fig. 3, broken black lines) and the straightening of the river for shipping (see Fig. 4, broken grey lines). The road network was also extended to improve travel between the star-shaped town centres in the region (see Figs. 3 and 4, white lines). Thus, the school neighbourhood (shown in the detail below illustrating the settlement structure) featured stronger infrastructural links.

As the urban form of this neighbourhood changed from 1830 to 1970, two central potential causes of crisis can be pinpointed. Firstly, the Old Town was merged with settlements on the periphery and another town which had developed separately to form a new administrative unit (see Fig. 5; black line). Secondly, the star-shaped patterns of the two town centres were at odds with the zones following flowing lines: these lines were infrastructural barriers preventing the two town centres from linking together as a new, unified settlement structure. Thus, a polycentric town was formed as an administrative unit, with two polarising

Fig. 4 Settlement structure of the urban zone in 1930 (*Source* © AG Raumwissenschaftliche Schul- und Bildungsforschung)

high-intensity zones. Looking at the shape of the town as an administrative unit, it can be seen from its settlement structure that there was no centre shared by the town as a whole (see Fig. 5; grey area).

Over the course of urban change, the school neighbourhood has lost its centre twice. On one hand, a process of secularisation manifested itself in the ecclesiastical building being torn down in 1882. The spatial trace left behind was an infrastructural hub as the centre of the neighbourhood. On the other hand, as the neighbourhood merged with another small town, a new municipal administrative unit was established. Between them, in the centre, the suburbs of the star-shaped high-intensity zones which form the cores of the two neighbourhoods met head-on, but it was precisely at these points of fragile connection that they were sliced

Fig. 5 Settlement structure of the urban zone in 1970 (*Source* © AG Raumwissenschaftliche Schul- und Bildungsforschung)

through by the flowing lines of the Fordist infrastructure. A blurry area between the two appeared as the centre of the new polycentric town, looking like a burning lens (see Fig. 5, grey area). Although this almost square centre was easily reached from all the districts, for years it was of no significance to the town. In 2001, a football stadium for the local club was then built in this empty, strife-torn centre. Its architectural uniqueness was to make it an identification symbol for the whole region (cf. Wayss and Freytag 2008). This attempt to recentre the polycentric town

Fig. 6 Town logo (*Source* © Stadt Gelsenkirchen)

Fig. 7 Football club logo (*Source* © FC Schalke 04)

using the reference point of football can also be seen from the way the town logo (see Fig. 6) was changed to link in with the football club logo (see Fig. 7).

The theorisation of logos as a means of expressing spatial planning concepts, and the methods used for compositional analysis (cf. Imdahl 1996) and parallel projection (cf. Müller 2012) are described in detail elsewhere (cf. Böhme and Herrmann 2012; Böhme and Flasche 2015). The town logo (see Fig. 6) features a spatial plan with a basic concentric pattern, extending into interlinked lines. This refers not only to the patterns of the original neighbourhood cores, with their centres and peripheries, but also to the new, empty centre formed when the two were merged. Another point which stands out is that the circular limit enclosing the interior is interrupted. This guides one's glance from right to left straight into the empty nucleus, which can be read as the expression of a lack of any meaningful central focus. The football club logo (see Fig. 7) also has a circular outer, but here the club emblem is placed in the centre. This shifts the football stadium in material terms into the empty centre of the polycentric town: the football club's logo puts it forward as a potential identification point for the neighbourhoods' communities.

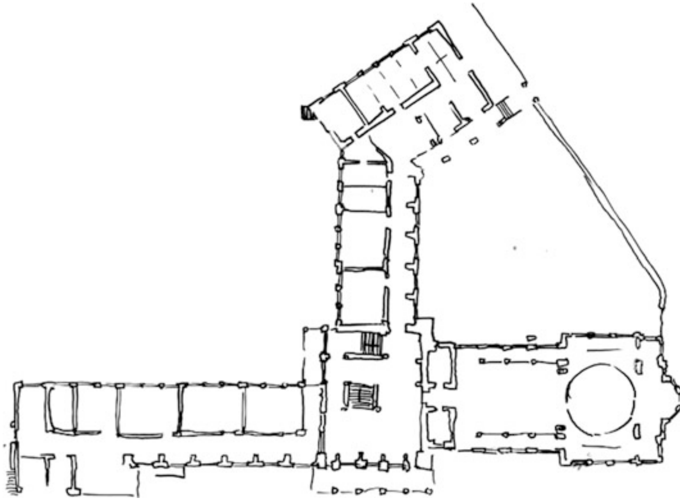

Fig. 8 Floor plan—ground floor of school (*Source* © Viktoria Flasche)

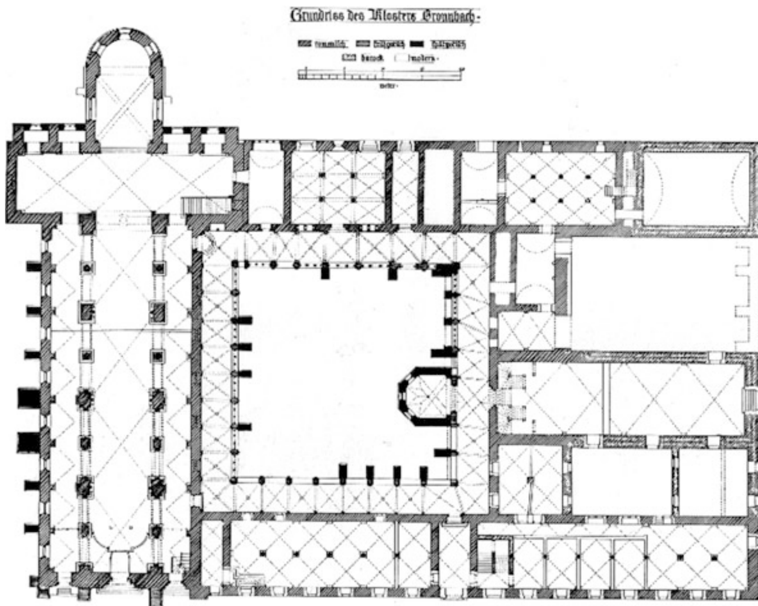

Fig. 9 Parallel projection: floor plan of Bronnbach Monastery (*Source* © Wissmann (2009))

The Transformation of the School Area

During the transformation of the neighbourhood's settlement structure, as outlined above, in 1914 the school was built as the "Girls' grammar school". On one hand, the floor plan of the school building preserves a religious symbolism; on the other hand, the elevation embodies symbolic references to how the emergence of Fordism was tackled and the wealth it entailed.

Looking at the floor plan of the school building (see Fig. 8), the repeated lines of cell-shaped rooms refers to the pattern of monastery architecture (for the parallel projection see Fig. 9), which spatialises disciplinary techniques (cf. Foucault 1976; Treiber and Steinert 1980; Böhme 2012; Herrmann 2013). In contrast to the cells, there is a large space which is similar in shape to the floor plans of churches (e.g. at monasteries) (for the parallel projection see Fig. 9).

As in the school neighbourhood, the religious symbolism of the pedagogical space is preserved in ecclesiastical structures. Though the large hall was initially used to hold school church services, as secularisation progressed it began to be used as an assembly hall, and at times even as a sports hall (see Figs. 10 and 11). This part of the building is currently being converted into a dining hall and multifunctional room. The spatialised aura of the holy has thus been replaced by secular administration of the masses.

In the design of the school facade, the reconstruction focuses on the entrance (see Fig. 12), whose role in the architectural choreography is that of spatialising the opening up of school practice. A parallel projection of the architectural design of the school entrance shows that there are references to segments of neighbourhood buildings. The similarities in shape between the entrance to the school and that at the railway station stand out in particular (for the parallel projection see Fig. 13). As the station opens up access to the infrastructural space of the rail networks, the school thus expresses the promise that entering this building will provide access to the wealth of Fordism.

This expression is particularly underlined by the shape of the station gable, the principle of which is based on impressive buildings from bourgeois residential milieus. It is, after all, precisely these milieus which were expected to counter the imagined cultural decline caused by working-class immigrant families. In accordance with contemporary Prussian policy on culture and education, they were intended to have a bourgeois, nationalist look in response to the much-criticised social democracy (cf. Piaschinski 2009, p. 84ff).

The basic structure of the facade design on the side facing the school's inner courtyard (see Fig. 14) reproduces the grid-like facade of the tax office (for the parallel projection see Fig. 15). At the same time, a compelling parallel projection can be made between the tower-like section of the school building which houses the teachers' and headmaster's quarters (see Fig. 16) and the town hall (for the parallel projection see Fig. 17). The architectural references to the tax office and the town hall are spatialisations of the school's understanding of itself as an administrative authority for administration and taxes.

Fig. 10 Multifunctional room, view from entrance (*Source* © Viktoria Flasche)

Fig. 11 Multifunctional room, view from the side into the domed hall (*Source* © Viktoria Flasche)

Fig. 12 Entrance to the school (*Source* © Viktoria Flasche)

Fig. 13 Parallel projection: entrance to the old town railway station (*Source* © Archiv der Deutschen Gesellschaft für Eisenbahngeschichte)

Fig. 14 View of the school from the playground (*Source* © Viktoria Flasche)

Fig. 15 Parallel projection: town tax office (*Source* © Viktoria Flasche)

Fig. 16 View of the school from behind, with tower (*Source* © Viktoria Flasche)

Fig. 17 Parallel projection: old town hall (*Source* © Digitale Sammlung der Westfälischen Wilhelms-Universität Münster)

When the elevation is examined using parallel projections, the general impression is that the school building reproduces sections of architecture from the neighbourhood. These architectural references are again an expression of the school's pedagogical focus. Thus, the school is originally assigned the role of a central place for religious education; then, as the neighbourhood is transformed by Fordism, it becomes a central locational factor behind regulation, administration and expansion.

Today, the school's symbolic references both to religion and to the cultural upturn when the mining region was established through Fordism are in crisis. All that is left is the administration of the masses and the need to establish a new, meaning-making central focus, including in the field of pedagogical practice. This search for a meaning is expressed in the new logo design. In the old school logo (see Fig. 18) the city logo came first (see Fig. 6). This is functionally logical, as the town shares its initials with the person after whom the school is named. However, this brings together the subject of the emptiness at the centre of the urban space and the school. Though the two letters which follow have the same linear pattern, the thickness and shape of the lines are different: the logo is split inconsistently into two parts. The first letter and the two which follow it stand almost unconnected in a row, expressing the fact that it is not possible to design the school as the new, meaning-making central focus for the neighbourhood.

Interestingly, the current logo, introduced in 2012 (see Fig. 19) again features the three initials of the school name, but now also in blue, in line with the town logo and that of the football club. The link to the football club is also underlined by the figural pictogram of a goalkeeper "frozen" in mid-leap (for the parallel projection see Fig. 20), holding up his index finger like a lecturer, pointing upward in a mediating gesture combining admonition and an indication of the heavens. At the same time, however, his raised finger could be the everyday gesture of a schoolchild raising his hand. The other hand, by contrast, is portrayed as receiving something. The combination of one hand being raised or showing something and the other being given something reflects the subject of school teaching and learning.

The logo thus makes reference to teaching scenes which regularly occur during football training, and so is an expression of a sports teaching outlook. Within the

Fig. 18 Old school logo (*Source* © Gertrud-Bäumer-Realschule Gelsenkirchen)

Fig. 19 Current school logo (*Source* © Gertrud-Bäumer-Realschule Gelsenkirchen)

school itself, as in the school neighbourhood, sport thus also replaces religion and a focus on Fordism as a symbolic nucleus and community-building identification point (cf. Lenhard 2002).

Need for Professionalisation Within the School

The reconstructions and results of our studies, only a small section of which are shown here, demonstrate impressively the spatialisation of the need for professionalisation within the pedagogical space of the school. Thus, firstly, the shape of the school and neighbourhood are revealed to have undergone simultaneous, parallel changes with regard to community-building social references, dominated by religion, Fordism and finally sport (football). At other mainstream schools, it has also been impossible to reconstruct any school education concepts or pedagogical symbolism which were unrelated to the neighbourhood's specific needs, circumstances and focuses (cf. Herrmann 2014, and the project publication, 2015). In those schools, too, no traces were found of educational rationalisation from the field of pedagogy, for example based on pedagogical concepts devised by the teaching staff and thus with a sound basis in child raising principles or education theory. This is where the second result comes in, related to the material form of the school building: this case study is a representative indication that schools' pedagogical practice has not produced any specific architecture (see also Malinin in this volume). Instead, school architecture is a kind of patchwork of references to structures from other functional systems which were central to symbolism in the neighbourhood at the time the school was first built. School architecture is thus an expression of the need for professionalisation in school pedagogical practice whenever no trace of educational concepts can be found which are unrelated to the patterns specific to the neighbourhood (see also Mahony and Hextall in this volume). In this case, the school building simply gives preference to reproducing the neighbourhood culture (including its potential for crisis). And in this case,

Fig. 20 Parallel projections: goalkeeper (*Source* © Bundesarchiv. Allgemeiner Deutscher Nachrichtendienst – Zentralbild (Image 183))

pedagogical practice can also be said only to be semi-professional in terms of its justification, in that the school's symbolism, as a pedagogical space, is based more on the interests specific to the neighbourhood, and less on the processes used to educate young people. Architectures such as those described in this case play a role in reproducing the segregation of neighbourhoods and the educational inequality this entails to an extent which has so far been underestimated: worked in stone, the pedagogical concepts shaped by each neighbourhood continue to leave their mark.

Bibliography

Archiv der Deutschen Gesellschaft für Eisenbahngeschichte. *Postkarte des Hauptbahnhofs Gelsenkirchen – Historische Ansicht um 1950.*

Böhme, J. (2000). *Schulmythen und ihre imaginäre Verbürgung durch oppositionelle Schüler*. Bad Heilbrunn: Klinkhardt.

Böhme, J. (2012). Schulräumliche Ordnungsparameter der Disziplinierung. Perspektiven einer Pädagogischen Morphologie. In T. Coelen, H. Schröteler-von Brandt, A. Zeisung, & A. Ziesche (Eds.), *Raum für Bildung. Ästhetik und Architektur von Lern- und Lebensorten* (pp. 219–232). Stuttgart: transcript.

Böhme, J., & Flasche, V. (2015). Hermeneutik einer Pädagogischen Morphologie. Zur Rekonstruktion der pädagogischen Bedeutung von Architekturen. In M. Heinrich & A. Wernet (Eds.), *Rekonstruktive Bildungsforschung*. Wiesbaden: VS.

Böhme, J., & Herrmann, I. (2012). *Schule als pädagogischer Machtraum. Typologie schulischer Raumentwürfe*. Wiesbaden: VS.

Digitale Sammlung der Westfälischen Wilhelms-Universität Münster. *Das Rathaus in Gelsenkirchen: Westfalen; Sonderabdruck aus No. I der "Deutschen Bauzeitung" 1895.* http://sammlungen.uni-muenster.de/hd/periodical/structure/2394425. Accessed September 08, 2014.

Fassmann, H. (1993). *Arbeitsmarktsegmentationen und Berufslaufbahnen. Ein Beitrag zur Arbeitsmarktgeographie*. Wien: Akademie Österreich.

Foucault, M. (1976). *Überwachen und Strafen. Die Geburt des Gefängnisses*. Suhrkamp: Frankfurt a. M.

Halbwachs, M. (1938/2002). *Soziale Morphologie. Ausgewählte Schriften.* Bd. 4. Konstanz: UvK.

Hartle, J. F. (2006). *Der geöffnete Raum. Zur Politik der ästhetischen Form*. München: Fink.

Häußermann, H., Läpple, D., & Siebel, W. (2008). *Stadtpolitik*. Suhrkamp: Frankfurt a. M.

Helsper, W., & Böhme, J. (2000). Schulmythen. Zur Konstruktion pädagogischen Sinns. In K. Kraimer (Ed.), *Die Fallrekonstruktion. Sinnverstehen in der sozialwissenschaftlichen Forschung* (pp. 239–274). Frankfurt a. M.: Suhrkamp.

Helsper, W., Böhme, J., Kramer, R.-T., & Lingkost, A. (2001). *Schulkultur und Schulmythos*. Opladen: Leske & Budrich.

Helsper, W., Hörster, R., & Kade, J. (2003). *Ungewissheit. Pädagogische Felder im Modernisierungsprozess*. Weilerswist: Velbrück.

Herrmann, I. (2013). Schulische Heterotopien – Schulräumliche Heterotopien. Pädagogische Organisationen im Spannungsfeld von Einsperrung und Ausschließung. In R. Hartz & M. Rätzer (Eds.), *Organisationsforschung nach Foucault. Macht - Diskurs – Widerstand* (pp. 233–256). Bielefeld: transcript.

Herrmann, I. (2014). *Vandalismus an Schulen. Bedeutungsstrukturen maskierender Raumpraktiken*. Wiesbaden: VS.

Imdahl, M. (1996). *Giotto. Arenafresken. Ikonographie, Ikonologie, Ikonik.* München: Fink.

Krüger, H.-H. (1990). *Abschied von der Aufklärung. Perspektiven der Erziehungswissenschaft*. Opladen: Leske & Budrich.

Lenhard, M. (2002). *Vereinsfußball und Identifikation in Deutschland. Phänomen zwischen Tradition und Postmoderne*. Hamburg: Kovac.

Lichtenberger, E. (1998). *Stadtgeographie. Begriffe, Konzepte, Modelle, Prozesse.* Stuttgart, Leipzig: Teubner.

Luhmann, N. (1988). *Reflexionsprobleme im Erziehungssystem*. Suhrkamp: Frankfurt a. M.

Müller, M. R. (2012). Figurative Hermeneutik. Zur methodologischen Konzeption einer Wissenssoziologie des Bildes. *Sozialer Sinn. Zeitschrift für hermeneutische Sozialforschung, 13*, 129–163.

Neumann, H., & Wagner, R. (1984). *Gelsenkirchen*. Düsseldorf: Wagner.

Piaschinski, S. (2009). *Macht, Glaube, Tradition - Der Wandel des Gymnasiums von 1800 bis PISA*. Hamburg: Kovac.

Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1980). *Fünfzehntausend Stunden. Schulen und ihre Wirkung auf die Kinder*. Weinheim, Basel: Beltz.

Schnur, O. (2008). Quartierforschung im Überblick. In O. Schnur (Ed.), *Quartierforschung. Zwischen Theorie und Praxis* (pp. 19–53). Wiesbaden: VS.

Schroer, M. (2006). *Räume, Orte, Grenzen*. Suhrkamp: Frankfurt a.M.

Treiber, H, & Steinert, H. (1980). *Die Fabrikation des zuverlässigen Menschen. Über die "Wahlverwandtschaft" von Kloster- und Fabrikdisziplin.* München: Heinz Moos.

Vogelpohl, A. (2008). Stadt der Quartiere. In O. Schnur (Ed.), *Quartierforschung. Zwischen Theorie und Praxis* (pp. 69–86). Wiesbaden: VS.

Wayss & Freytag Ingenieurbau AG, Konzerngesellschaft der Royal BAM Group. (2008). *Fakten: Arena auf Schalke.* http://www.wfingbau.de/fileadmin/Userfiles/pdf/de/historie/Arena-auf-Schalke.pdf Accessed April 01, 2014.

Wissmann, G. (2009). *Kloster Bronnbach. Ein Gang durch die Geschichte der ehemaligen Zisterzienserabtei im Taubertal.* Buchen.

Zirfas, J. (2004). *Pädagogik und Anthropologie*. Stuttgart: Kohlhammer.

Rethinking Educational Spaces in School Design

Laura Healey Malinin

Abstract Approaches to 21st century school design in the United States fall into five realms of concern: Equity, Security, Community, Creativity, and Empowerment. Each of these realms incorporates different methods of assessing the value that design strategies contribute to educational outcomes. Schools have begun to rethink the role of educational spaces in student physical health, psychological wellbeing, and behavior, as well as how the school campus can become a tool for learning. Despite this, the school building, in its form and structure, remains surprisingly similar to those built during the prior century. As architects, planners, and other design professionals face mounting pressures to create new school designs that contribute to the educational return on investment (ROI), they are faced with the challenges of designing in an educational landscape shifting from the impact of disruptive technologies, on a world with depleting natural resources, and amidst an increasingly globalized economy where students must be prepared to work and live.

Keywords School design · Learning environments · Green schools · The third teacher · Biophilic design · Restorative design · Discovery learning · Creativity · Learning landscapes · Participatory design · Student voice

Cities around the globe are embarking on ambitious plans to design and renovate schools to meet demands for improved student knowledge and skills required for a 21st century world. In so doing, they are faced with the challenge of designing in an era marked by dwindling natural resources, increased population growth, and economic scarcity. The pressure to demonstrate value in school architecture is, consequently, moving beyond evaluations of aesthetics and function to identify additional measures of quality, such as resource conservation, occupant health and safety, and

L.H. Malinin (✉)
Colorado State University, 150 Aylesworth Hall, SE, 1574 Campus Delivery, Fort Collins, CO, USA
e-mail: laura.malinin@colostate.edu

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student behaviors. If “school” is simultaneously a *community of people* (i.e. teachers, administrators, students, parents and others) *a set of practices* (pedagogical and administrative), and *a place* where the community members engage in such practices, then value in the design of school campuses must be considered as part of this intertwined relationship. Yet scholarly research on educational spaces rarely takes such an integrated approach (Gislason 2007; Tanner 2000; Uline et al. 2009).

Learning space research considers how relationships between people, practices, and place impact user wellbeing, performance, and learning (see Fig. 1), but findings are communicated in two separate literatures: *learning environments* and *school facilities* (Gislason 2007). *Learning environments* studies consider how the social learning environment (people-practice relationship) affects learning outcomes. *School facilities* research examines the physical school and campus environment and their impacts on occupant wellbeing (people-place relationship) and behavioral performance (practice-place relationship).

Although the division in the literatures makes integrative approaches to school design challenging, emerging research is beginning to bridge the gap. Scientists generally agree that physical environments play an instrumental role in the ways people think and interact with others. Consequently, school facilities research is beginning to include impacts of school design on cognition and learning environments research is starting to consider how spaces mediate social interactions. Ultimately, effective school design change requires alignment between pedagogical and administrative practices, opportunities and constraints provided by physical features of the school setting, and perceptions, needs, and abilities of the school community. Without such an approach it will be difficult for school architects and other stakeholders to evaluate educational *return on investment* (ROI)—the value school designs contribute by maximizing performance efficiencies, promoting occupant wellbeing, and improving student learning. It is time to connect the school design literatures.

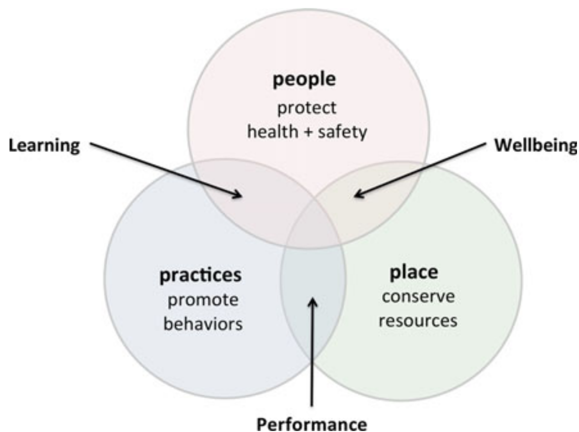

Fig. 1 Assessing school design value (*Source* Own representation)

Rethinking School Design: Five Realms

Schools, as designed artifacts, reflect the geography, culture, memories, and social behaviors of their localities (Burke and Grosvenor 2008; Gislason 2007). Through their form and materiality they encourage certain behaviors and values, conveying a *hidden curriculum* about a community's hopes and aspirations for the future (Gislason 2007; Titman 1994). In the United States, architects and planners have been leading the charge to rethink ways to design and evaluate educational spaces for children and youth. Organizations like the US Green Building Council (USGBC) and Collaborative for High Performance Schools (CHPS) serve as clearinghouses for empirical research, design cases, and best practices for school facility design. While these databases are intended to help design professionals and other stakeholders create value through their services, information is not structured in a way to encourage rethinking educational spaces for 21st century demands. However, a review of trends in US school designs suggests there are five realms where the role of school design is being reconsidered. Each realm reflects a distinct area of concern that influences design decisions, and is listed (from most to least frequent) in Table 1 as *Equity*, *Security*, *Community*, *Creativity*, and *Empowerment*.

Equity

A significant US trend is school designs that promote environmental sustainability, including the *Green Schools* (USGBC/LEED) and *High Performance Schools* (CHPS) movements (Gordon 2010; Kats 2006). The goal of sustainable design is to achieve a balance between human livability, economic efficiency and environmental sustainability. While much literature about sustainable school design has historically focused on the efficient use of natural resources, a growing body of evidence suggests that what is good for the environment is also good for people. For the past twenty years research has substantiated the benefits of natural lighting on student learning and overall health (Heschong and Mahone 1999; Heschong 2003; Nicklas and Bailey 1996). The developing trend toward basing architectural design decisions on empirical evidence (*evidence-based design*) has added indoor air quality (Berry 2002; Earthman 2002), acoustics (Lercher et al. 2003; Nelson 2000), and thermal comfort and environmental control (Bernardi and Kowaltowski 2006; Earthman 2002) to the list of school building attributes that impact student wellness, behavior, and achievement. Sustainable school research focuses foremost on user health and secondarily on mental wellbeing (Gordon 2010; Kats 2006).

Green and High Performance school designs are popularized by rating systems (LEED and CHPS) and marketed as strategies to improve student achievement. The underlying philosophy behind sustainable schools is that design and construction practices should mitigate negative impacts of school buildings on both occupants and the environment. Yet the higher costs associated with sustainable construction

Table 1 School design realms (*Source* Own representation)

Realm	Values	Hidden pedagogy	Design approach	Challenges
Equity	Schools are *social equalizers*	School design provides high performance environments to optimize learning for all students	Evidence-based design strategies minimize negative impacts on occupant health and wellbeing such as through air quality, acoustics, thermal comfort, daylighting, sustainable materials, and universal access	Educational ROI is assessed in terms of mitigating detrimental impacts
Security	Schools are *safe havens*	School design shapes user behaviors	Form and materials are used to remedy physical and psychological security problems by changing user behavior, including routes to school, facility access, bullying, and behavior issues related to stress or distraction	Designs for physical security problems may create psychological issues (and vice versa) making educational ROI difficult to assess
Community	Schools are *mini-societies*	School design communicates socio-cultural values and aspirations	Design metaphors such as neighborhood, street, and third place are used to support social learning, foster community building, and create sense of place	Without evidence of impact on educational ROI, design patterns may be architectural gift-wrapping
Creativity	Schools are *places of discovery*	School design triggers curiosity, experimentation, and learning	School building and grounds are designed to serve as a Third Teacher to support project-based and discovery learning	Without curricular support, designs may be ineffective/detrimental to educational ROI
Empowerment	Schools *transform students from consumer to producer*	School design provides resources for personalized learning	Participatory design strategies consider student voice, but new approaches are needed	Requires rethinking educational goals and the role of school in society

and certification is a deterrent for lower socio-economic neighborhoods—where schools that suffer from the greatest environmental problems and lowest rates of student achievement are typically located (Kats 2006). At the heart of the sustainable school movement are issues of equity. Compulsory education in the US is founded on principles of social equity, which continue to drive policy today. Sustainable school design practices, however, are still considered a luxury. Alignment of school design and educational practices in the *Equity Realm* around the common belief that all schools have a social responsibility to provide optimal environments for equal access to learning may help shape future policy, ensuring equity in school facilities.

The *Equity Realm* unites design approaches that value schools as *social equalizers*. In this respect, the realm encompasses sustainable design as well as related design movements like *Healthy Schools* and *Universal Design*. The Healthy Schools movement is concerned with promoting environmental health in school buildings and sites through design, construction, and facilities maintenance processes (Coalition for Healthier Schools 2013). Although the core focus is on indoor air quality, this movement is broadening to include access to healthy foods and design strategies to promote physical fitness in schools (Everett Jones et al. 2003; Story et al. 2009). The *Universal Design for Learning* (UDL) movement advocates for environmental designs and educational practices that support universal access and use by people of all ages, sizes, and abilities (including physical, cognitive, and sociological) (Pisha and Coyne 2001).

Security

Design and research in the *Security Realm* are united by a moral concern to protect students from harm. Tragic incidents of school violence have made school security a top concern for many parents, administrators, and city officials. This second realm includes design approaches that consider the physical as well as the *psychological* aspects of security. School designs that focus on physical safety consider how students travel to school (Braza et al. 2004; Villanueva et al. 2013), how school environments encourage or discourage violence (Astor and Meyer 2001; Johnson et al. 2012), and the relationship between school features and bullying behaviors (Fram and Dickmann 2012; Swearer and Doll 2001). These strategies generally focus on shaping user behavior to establish "social norms" (Johnson et al. 2012). Designs that address user physical safety can also impact the psychological aspects of security, sometimes negatively. Students frequently report that security features like fences, surveillance cameras, and backpack screening make their schools feel like prisons (Burke and Grosvenor 2008, p. 161). Thus literature in this area warns about the importance of discriminating between perceived versus actual security threats in the environment (Johnson et al. 2012).

The psychological aspects of security are grounded in three growing movements in school design: *Pride in Place* (Kumar et al. 2008; Rudd et al. 2008), *Biophilic*

Design (Moore and Cooper Marcus 2011), and *Restorative Design* (Kaplan 1995). The Pride in Place movement is based on empirical evidence that suggests behavior improves when students feel proud about the aesthetics and structural quality of their school buildings. Biophilic design is based on the hypothesis that people have a biological affinity with nature and that access to nature is essential for their emotional wellbeing. Restorative design considers how views of nature have been found to reduce stress and improve attention—leading to increased productivity. Students in schools that incorporate natural elements and views from windows onto complex greenery have been found to have fewer behavioral problems and higher standardized test scores than students in schools without views (Matsuoka 2008; Wells 2000). Literature in this area has focused attention to the ways school gardens and landscapes may add value to school designs.

Community

Research and practice that fall within the third ream value the social aspects of learning and community building. Modern US school designs often incorporate design metaphors that suggest how the school is a reflection of society in the city, including *Learning Neighborhoods*, *Learning Streets*, and common areas that function as *Third Places* (Burke and Grosvenor 2008; Lippman 2010; Nair et al. 2009). Learning Neighborhoods organize students and teachers into small clusters of classrooms and related educational spaces, organized by age or theme. This is referred to as a *school within a school* model and intends to divide large facilities into smaller places in order to build community identity and sense of place. Learning Streets are wide hallways that unite clustered classrooms within a Learning Neighborhood, and connect these neighborhoods to others within the school. Learning street designs provide physical and visual connectivity in order to foster community building, as well as common spaces for small group collaborative learning activities. The designs of larger school common areas, such as cafeterias, libraries, and plazas also reference in their forms and materials those places in the city that serve as *third places*. Third places are social spaces not affiliated with home or work that foster democracy, civic engagement, and sense of place through impromptu conversations—such as the café, bookstore, or arcade (Oldenburg 1999).

School designs within the *Community Realm* begin to more specifically link pedagogical practices and physical space based on theories of socially situated learning and *Communities of Practice* educational models (Lave and Wenger 1991). Through their form and materiality, learning spaces hope to replicate some of the *behavior settings* (Barker 1968) found in social life in order to establish desired social norms. Yet there is little empirical investigation into how such architectural design strategies contribute to educational ROI. The popular replication of architectural metaphors in modern school design warrants further investigation to assess whether they are more than *architectural gift-wrapping*, which has little or no impact on pedagogical practices and learning outcomes.

Creativity

Design approaches within the *Creativity Realm* consider how the physical attributes of educational spaces become resources for curiosity, discovery, experimentation and creativity. The *Third Teacher Movement*—based on the belief that children's learning is shaped by three teachers, adults, peers, and the physical environment—has popularized this design approach (O'Donnell Wicklund et al. 2010). Design features of school buildings and grounds are intended to serve as curricula to transform teaching and learning. Strategies within this realm vary from exposing building elements like structural, material, and building systems as resources for science class, creating non-traditional learning spaces like fabrication labs, gardens, and chicken coops for project-based learning, and providing multisensory design features as *evocative objects* to trigger curiosity, interaction, and creative problem solving through discovery learning.

Project-based (Tiwari et al. 2006) and discovery learning (Rogers 1990) methods are gaining traction in US schools as ways to encourage the development of critical thinking skills, reacting to criticisms that the standardized testing requirements of the *No Child Left Behind Act* of 2001 led to "no child left thinking" (Westheimer 2011). The Third Teacher movement was a natural response to this trend as a way to highlight the value of architectural design to instructional methodologies. Furthering momentum in this movement, LEED and CHPS rating systems both assess points for *the school as a teaching/learning tool*. Whether architectural designs actually improve student understanding about environmental sustainability, however, remains largely uninvestigated. Critics argue that, without teacher guidance, discovery methods may lead to misunderstanding and erroneous learning or students may disengage from confusion or frustration (Alfieri et al. 2011; Kirschner et al. 2006).

Empowerment

The fifth design realm is concerned with child and youth empowerment, including how students can be co-designers of their school and co-choreographers of their learning. Of the five, the *Empowerment Realm* most radically rethinks the role of student and school in society. In recent years, there has been a growing trend to include students' opinions in the design of their education, including school facilities (*participatory design*) and educational policies and curriculum (*student voice*) (Fielding 2004; Woolner et al. 2007). This shift in the student role is influenced by The United Nations Convention on the Rights of the Child (CRC), ratified in 1990, which states that children and youth have the right to participate in decision-making processes that affect their lives (Robinson and Taylor 2007). One outgrowth of these movements is the incorporation of *service learning* into school curricula. For example, a service-learning initiative called *Learning Landscapes*

engages students, teachers, and community members in the planning, construction, and maintenance of school and neighborhood playgrounds (Brink and Yost 2004). Research suggests that when students are empowered through voice and ownership of a service-learning project (such as in the Learning Landscapes program) their self-confidence and civic engagement improves (Morgan and Streb 2001).

Research and practice align in the Empowerment Realm over concerns for how a student transforms from consumer to creator of knowledge. Consequently, the idea of "school" may evolve to become a living laboratory that extends beyond the bounds of a physical school campus. With its emphasis on student-led problem finding, design, and implementation, the Empowerment Realm encompasses new directions in distributed models of education—including hybrids that fall somewhere between home schooling and centralized formal education models. Technological advances provide a myriad of choices that empower students to create their own *Personal Learning Environments* (Dabbagh and Kitsantas 2012), but school design today does little to consider the potential impact of emerging technologies to radically disrupt the physical configuration of educational spaces. To rethink 21st century school design, architects and planners must consider how technological developments in *mobile computing* and *embedded interaction* (incorporating interactive technology into everyday objects) provide opportunities to re-envision the future of educational spaces—such as through emerging concepts like *Smart Objects*, the *Internet of Things*, and *4d space* (Bullivant 2007; Thomas 2010).

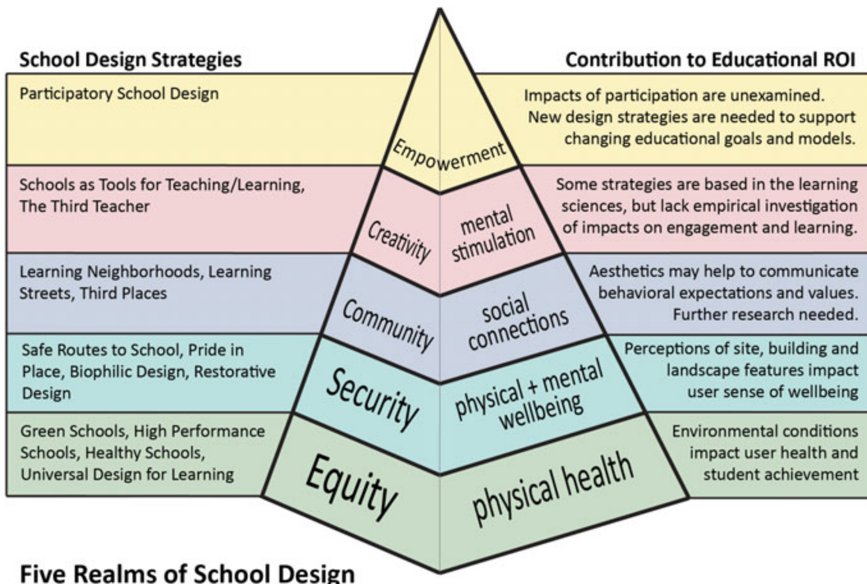

Fig. 2 Evaluation of the realms of school design by contributions to the returns to education (*Source* Own representation)

Conclusion

Although US schools often incorporate strategies from multiple realms, most school facility research focuses on basic human physical and psychological needs, providing evidentiary support that mitigating environmental problems in schools positively impacts health, behavior, and learning (Gordon 2010; Kats 2006). Figure 2 describes how the five school design realms may be conceptualized as a pyramidal form that arranges design strategies from most to least common. The Equity and Security realms form the pyramid base and illustrate that the majority of new school designs are rethinking the role of educational space in user health and wellbeing—the most fundamental of human needs. The middle tiers of the pyramid describe the Community and Creativity realms, which link design strategies to pedagogical practices. These reveal how schools are beginning to rethink ways the building and campus may shape student behavior and be tools for learning. There is less evidentiary support within these realms, however, for the value design strategies contribute to learning outcomes (Higgins et al. 2005). More research is needed to better understand the potential socio-psychological impacts of learning space designs and how such knowledge might influence the reconceptualization of school architecture. At the top of the pyramid, the Empowerment Realm reconsiders the role of student and school in society but, aside from participatory design strategies, it is unclear how school designs are (or should be) re-envisioned in this area. This realm is perhaps the most challenging for school designers and other stakeholders to reach, however it has the most potential to significantly rethink learning space design. As students face an increasingly globalized economy, demands for personalized and authentic learning through engagement in meaningful and real-world problems suggest that architects and planners must consider how technology and distributed models of learning will shape the form and structure of schools for the future.

Bibliography

Alfieri, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2011). Does discovery-based instruction enhance learning? *Journal of Educational Psychology, 103*(1), 1–18. doi:10.1037/a0021017

Astor, R. A., & Meyer, H. A. (2001). The conceptualization of violence-prone school subcontexts: Is the sum of the parts greater than the whole? *Urban Education, 36*(3), 374–399. doi:10.1177/0042085901363004

Barker, R. G. (1968). *Ecological psychology; concepts and methods for studying the environment of human behavior*. Stanford, CA: Stanford University Press.

Bernardi, N., & Kowaltowski, D. C. C. K. (2006). Environmental comfort in school buildings: A case study of awareness and participation of users. *Environment and Behavior, 38*(2), 155–172. doi:10.1177/0013916505275307

Berry, M. A. (2002). *Healthy school environment and enhanced educational performance: The case of Charles young elementary school Washington, DC*. Carpet and Rug Institute. https://216.197.120.146/documents/scientific_resources/020112_Charles_Young.pdf. Accessed March 1, 2014.

Braza, M., Shoemaker, W., & Seeley, A. (2004). Neighborhood design and rates of walking and biking to elementary school in 34 California communities. *American Journal of Health Promotion, 19*(2), 128–136. doi:10.4278/0890-1171-19.2.128

Brink, L., & Yost, B. (2004). Transforming inner-city school grounds: Lessons from learning landscapes. *Children, Youth and Environments, 14*(1), 209–233.

Bullivant, L. (2007). *4dsocial: Interactive design environments*. London: Wiley.

Burke, C., & Grosvenor, I. (2008). *School*. London: Reaktion.

Coalition for Healthier Schools. (2013). *Toward healthy schools 2015: Progress on America's environmental health crisis for children*.

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education, 15*(1), 3–8. doi:10.1016/j.iheduc.2011.06.002

Earthman, G. I. (2002). *School facility conditions and student academic achievement*. UCLA's Institute for Democracy, Education, & Access. http://escholarship.org/uc/item/5sw56439#page-3. Accessed March 1, 2014.

Everett Jones, S., Brener, N. D., & McManus, T. (2003). Prevalence of school policies, programs, and facilities that promote a healthy physical school environment. *American Journal of Public Health, 93*(9), 1570–1575. doi:10.2105/AJPH.93.9.1570

Fielding, M. (2004). Transformative approaches to student voice: Theoretical underpinnings, recalcitrant realities. *British Educational Research Journal, 30*(2), 295–311. doi:10.1080/0141192042000195236

Fram, S. M., & Dickmann, E. M. (2012). How the school built environment exacerbates bullying and peer harassment. *Children, Youth and Environments, 22*(1), 227–249.

Gislason, N. (2007). Placing education: The school as architectural space. *Paideusis, 16*(3), 5–14.

Gordon, D. E. (2010). *Green Schools as high performance learning facilities.* National Clearinghouse for Educational Facilities. http://files.eric.ed.gov/fulltext/ED512700.pdf. Accessed March 1, 2014.

Heschong, L. (2003). *Windows and classrooms: A study of student performance and the indoor environment*. California Energy Commission. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.408.790&rep=rep1&type=pdf. Accessed March 1, 2014.

Heschong, L., & Mahone, D. (1999). *Daylighting in schools: An investigation into the relationships between daylighting and human performance*. Pacific Gas and Electric Company.

Higgins, S., Hall, E., Wall, K., Woolner, P., & McCaughey, C. (2005). *The impact of school environments: A literature review*. The Centre for Learning and Teaching, School of Education, Communication and Language Science, University of Newcastle. http://www.ncl.ac.uk/cflat/news/DCReport.pdf. Accessed March 1, 2014.

Johnson, S. L., Burke, J. G., & Gielen, A. C. (2012). Urban students' perceptions of the school environment's influence on school violence. *Children & Schools, 34*(2), 92–102. doi:10.1093/cs/cds016.

Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology, 15*(3), 169–182.

Kats, G. (2006). *Greening America's Schools*. Washington, DC: Capital E. https://www.math.unl.edu/~pradu3/TeachingUNL/Fall08/398MitC/pub_Greening_Americas_Schools.pdf. Accessed March 1, 2014.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist, 41*(2), 75–86.

Kumar, R., O'Malley, P. M., & Johnston, L. D. (2008). Association between physical environment of secondary schools and student problem behavior: A national study, 2000–2003. *Environment and Behavior, 40*(4), 455–486. doi:10.1177/0013916506293987

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lercher, P., Evans, G. W., & Meis, M. (2003). Ambient noise and cognitive processes among primary schoolchildren. *Environment and Behavior, 35*(6), 725–735. doi:10.1177/0013916503256260

Lippman, P. C. (2010). *Evidence-based design of elementary and secondary schools*. Hoboken, NJ: Wiley.

Matsuoka, R. H. (2008). *High school landscapes and student performance*. http://deepblue.lib.umich.edu/handle/2027.42/61641. Accessed March 2, 2014.

Moore, R. C., & Cooper Marcus, C. (2011). Healthy planet, healthy children: Designing nature into the daily spaces of children. In S. R. Kellert, J. Heerwagen, & M. Mador (Eds.), *Biophilic design: The theory, science and practice of bringing buildings to life*. Hoboken, NJ: Wiley.

Morgan, W., & Streb, M. (2001). Building citizenship: How student voice in service-learning develops civic values. *Social Science Quarterly, 82*(1), 154–169. doi:10.1111/0038-4941.00014

Nair, P., Fielding, R., & Lackney, J. A. (2009). *The language of school design: Design patterns for 21st century schools*. Minneapolis, MN: DesignShare.

Nelson, P. (2000). Acoustical barriers to learning: Children at risk in every classroom. *Language, Speech, and Hearing Services in Schools, 31*, 356–361.

Nicklas, M. H., & Bailey, G. B. (1996). Analysis of the performance of students in daylit schools. In *Proceedings of the National Passive Solar Conference* (Vol. 21, pp. 132–137). American Solar Energy Society Inc. http://www.viva-lite.in/tl_files/downloads/davlit_schools_student_performance.pdf. Accessed March 1, 2014.

O'Donnell Wicklund, P., Peterson, A. I., Furniture, V. S., & Design, B. M. (2010). *The third teacher: 79 ways you can use design to transform teaching & learning*. New York: Abrams.

Oldenburg, R. (1999). *The great good place: Cafés, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community*. New York: Marlowe, distributed by Publishers Group West.

Pisha, B., & Coyne, P. (2001). Smart From the start: The promise of Universal Design for Learning. *Remedial and Special Education, 22*(4), 197–203. doi:10.1177/074193250102200402

Robinson, C., & Taylor, C. (2007). Theorizing student voice: Values and perspectives. *Improving Schools, 10*(1), 5–17. doi:10.1177/1365480207073702

Rogers, P. (1990). "Discovery", learning, critical thinking, and the nature of knowledge. *British Journal of Educational Studies, 38*(1), 3–14. doi:10.1080/00071005.1990.9973831

Rudd, P., Reed, F., & Smith, P. (2008). *The effects of the school environment on young people's attitudes towards education and learning: Summary report*. National Foundation for Educational Research. http://eprints.whiterose.ac.uk/73960/. Accessed March 2, 2014.

Story, M., Nanney, M. S., & Schwartz, M. B. (2009). Schools and obesity prevention: Creating school environments and policies to promote healthy eating and physical activity. *Milbank Quarterly, 87*(1), 71–100. doi:10.1111/j.1468-0009.2009.00548.x

Swearer, S. M., & Doll, B. (2001). Bullying in schools. *Journal of Emotional Abuse, 2*(2–3), 7–23. doi:10.1300/J135v02n02_02

Tanner, C. K. (2000). The influence of school architecture on academic achievement. *Journal of Educational Administration, 38*(4), 309–330. doi:10.1108/09578230010373598

Thomas, H. (2010). Learning spaces, learning environments and the "displacement" of learning. *British Journal of Educational Technology, 41*(3), 502–511. doi:10.1111/j.1467-8535.2009.00974.x

Titman, W. (1994). *Special places, special people: The hidden curriculum of school grounds*. Surrey, UK: World Wide Fund for Nature UK.

Tiwari, A., Lai, P., So, M., & Yuen, K. (2006). A comparison of the effects of problem-based learning and lecturing on the development of students' critical thinking. *Medical Education, 40*(6), 547–554. doi:10.1111/j.1365-2929.2006.02481.x

Uline, C. L., Tschannen-Moran, M., & Wolsey, T. D. (2009). The walls still speak: The stories occupants tell. *Journal of Educational Administration, 47*(3), 400–426. doi:10.1108/09578230910955818

Villanueva, K., Giles-Corti, B., Bulsara, M., Trapp, G., Timperio, A., McCormack, G., et al. (2013). Does the walkability of neighbourhoods affect children's independent mobility, independent of parental, socio-cultural and individual factors? *Children's Geographies*, 1–19. doi:10.1080/14733285.2013.812311

Wells, N. M. (2000). At home with nature: Effects of "greenness" on children's cognitive functioning. *Environment and Behavior, 32*(6), 775–795. doi:10.1177/00139160021972793

Westheimer, J. (2011). No child left thinking: Democracy at-risk in American schools. *Colleagues, 3*(2), 8.

Woolner, P., Hall, E., Wall, K., & Dennison, D. (2007). Getting together to improve the school environment: User consultation, participatory design and student voice. *Improving Schools, 10* (3), 233–248. doi:10.1177/1365480207077846

Schools as 3D Textbooks for Sustainability Education

Marta Brković and Rosie Parnell

Abstract Some architects and researchers claim that sustainable school design can raise awareness of sustainability issues and stimulate children to explore the same, thus acting pedagogically as the 'third teacher'. However, existing design guidance explaining how to achieve sustainability in the school environment neglects this pedagogical potential. Studies delineating the ways in which school design might respond to education theories correspondingly encompass few sustainability issues. Identifying this gap, we searched the literature aiming to explain how the physical fabric of a sustainable school could provoke learning about sustainability, and on which pedagogical ideas these designs build. This paper critically reflects on the findings, drawing on relevant findings from a participatory post-occupancy study in a Spanish 'sustainable school' in order to establish principles and draw out messages that could be important for debates in the intersecting fields of school design and education. The findings are discussed under three core themes: food and healthy nutrition; celebrating cultural diversity; and managing the environment. It is concluded that in order to reap the pedagogical benefits of 'sustainable schools', the use of space needs to be choreographed through a collaborative development process with teachers and pupils.

Keywords Sustainable schools · The 'third teacher' · Built environment education · Spatial pedagogy

Faced with an ever-growing number of social, environmental and economic challenges, in 1987 sustainable development was proposed as a possible strategy for solving contemporary problems (Brundtland 1987). Since this time, education has

M. Brković (✉)
NGO ARQubator, 11030 Belgrade, Serbia
e-mail: marta.brkovic@gmail.com

R. Parnell
Department of Architecture and Built Environment, Northumbria University, Ellison Building, Newcastle NE1 8ST, UK
e-mail: rosie.parnell@northumbria.ac.uk

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been frequently proposed not only as the means to support understanding of the ubiquitous concept, 'sustainability', but also as the means to understand the myriad ways in which sustainability can be implemented at a local level (Stanners et al. 2008; UNESCO 2009). Since education has a central role to play in transforming our lives on the planet into more sustainable forms (Wade and Parker 2008), the transformation of education itself is surely one of our greatest challenges. It has been suggested that the "sustainable school is the most appropriate strategy for renovating educational processes and achieving quality education" (Gough 2005, p. 339).

A small, but increasing number of architects have realized that schools designed with sustainability in mind have potential, not only to reduce their impact on the environment, but also to greatly influence learning about sustainable development (Taylor 2009). A school's spaces and design features can effectively act as '3D' teaching tools (OWP/P Cannon Design et al. 2010, p. 10), raising awareness about sustainability issues and stimulating teachers, pupils and local community members to explore these further. Such architects believe that sustainable school spaces can in this way teach important lessons and act as the 'third teacher' (OWP/P Cannon Design et al. 2010).

There have been many relatively recent articles, books, and studies devoted entirely to the design of sustainable schools. Additionally, Education for Sustainable Development is such a widespread movement, that many schools around the world have adjusted their curriculum in order to incorporate its principles. However, few authors have discussed the issue at the intersection of these two fields; that is, how teaching the principles of sustainability might be embodied in the very design of a school building. During the last decade, as Scott (2010) notes, many schools "were built along green principles and had environmental education as part of their program in some form or other, but the interface of the two was much more difficult to uncover" (p. 91). In an extensive review of literature, we identified remarkably few publications which explained the link between the physical fabric of a sustainable school building and pedagogy of sustainability. Existing design guidance explaining how to achieve sustainability in the school built environment almost entirely neglects pedagogical potential. Similarly, studies delineating the ways in which school design might respond to education theories encompass few sustainability issues. Identifying this gap and wishing to contribute to the debate, we first reviewed the literature about school design as seen through two perspectives—sustainability and the 'third teacher'.

Sustainable Schools as the 'Third Teacher'

The idea of a school environment as the 'third teacher' has its roots in Maria Montessori's concept of a 'prepared environment'. In her book "The Secret of Childhood" she explains that "the first aim of the prepared environment is, as far as it is possible, to render the growing child independent of the adult" (Montessori 1966, p. 267). Montessori believed that all the material artefacts in an environment

affect the temperament and the development of a child. It followed that in such a conducive environment, children would be able to learn without the support of traditional teaching methods. The embodiment of this idea can be found in the work of Loris Malaguzzi and the Reggio Emilia schools. Reggio Emilia schools "reconceptualized space as a key source of educational provocation and insight" (Strong-Wilson and Ellis 2007, p. 40), and established the term 'the third teacher' (Forman and Fyfe 1998, p. 256).

Examining the school design literature, discussion addressing both sustainability *and* the 'third teacher' concepts is fragmented and appears in design guides, practice-based literature, theoretical texts and to a lesser extent in empirical studies. Thematically, three core groups of relevant literature can be distinguished. The first group focuses primarily on how school design elements can respond specifically to environmental sustainability requirements. Within this group, some publications take a step further and acknowledge the teaching potential of schools. To illustrate:

- the UK Department for Education and Skills observes that a building could be used as a 'teaching tool' (DfES 2006, p. 9);
- the architectural practice LPA (2009, p. 50) explains that a sustainable school is a 'living laboratory' where the students and the community can learn about the environment on a daily, practical basis;
- similarly, Ford (2007, p. 6) says that sustainable school can be a 'living laboratory' which can engage the pupils in learning about science, building arts, and environmental stewardship;
- Gaia Architects and Gaia Research (2005, p. 1) stress that the role of sustainable school design is crucial in demonstrating and imbuing in learners, awareness about sustainability issues;
- Gelfand and Freed (2010, p. 248) argue that school facilities could be a vehicle for learning, because transparent demonstration of sustainable behaviour has educational potential. According to these authors, environmental sustainability systems should be made visible.

The second group of studies links pedagogy and sustainable school space. The majority of these studies are practice-based explorations, though some claims in the work done by Taylor (2009) are supported with empirical evidence from her research. The studies by Taylor and also that by an international team of architects and designers—OWP/P Cannon Design et al. (2010)—are significant not just for using examples to demonstrate how school design responds to many sustainability aspects, but also for framing these examples with appropriate educational philosophies. The third group of publications by authors such as Nicholson (2005), Hertzberger (2008), and Nair and Fielding (2005), although not specifically concentrating on sustainable schools, provide some very useful and relevant insights by explaining the pedagogical potential of school spaces in general.

Through examination of this literature and wider practice-based sources we identified examples of aspiring sustainable schools in which design was developed to respond to particular sustainability themes and to act pedagogically. A number of

these examples were further studied through participatory post-occupancy studies with teachers and school students.

How the "Third Teacher" Teaches—Linking School Design with Sustainability Themes and Underlying Pedagogic Ideas

Below we critically reflect on the findings of the literature review described above, drawing on some of the spatial examples and our own empirical findings, in order to explain how a school building can 'teach' sustainability principles. A selection of sustainability themes has been chosen for this chapter:

- food and healthy nutrition;
- celebrating cultural diversity; and
- managing the environment.

More extensive explorations can be found elsewhere (Brković 2013).

Food and Healthy Nutrition: Learning About Connected Systems

Today, there is a substantial literature demonstrating the health, educational, knowledge, skills and behavioural benefits of cultivating food in schools (Nelson et al. 2011). Raised beds and food growing facilities become valuable learning spaces. Playgrounds filled with natural elements, plants, trees, flowers, water, small animals and bugs present endless opportunities for discovery, play and exploration (Burke 2005). Additionally, activities around producing, preparing and consuming food in schools present an opportunity for children to learn new skills, exercise responsibility (Desmond et al. 2004), be informed about healthy nutrition, appreciate and understand environment, and establish relationships with school and community members (Orme et al. 2011).

The edible schoolyard project is a good example where raised beds for growing food during the warm months, and greenhouses for growing food during the colder months, are interlinked with spaces for preparing, consuming and composting food in schools (Cliento 2010) (see Figs. 1 and 2). Just providing areas for food growing is not enough. Energy and heat producing systems, rainwater collectors, and off-grid waste sorting systems transparently show children that all of these systems are interlinked. Sustainable schools should accordingly be designed in ways that connect the school building with the nature in which the building is embedded, and with the children themselves. Orr (2004) frames this clearly when he proposes that all education is environmental, yet the environment must be understood more holistically—as a network of systems embedded one within the other. Sustainable schools should therefore be designed to demonstrate this clearly and to support pupils to explore these interrelations.

Additionally, our recent post-occupancy evaluation of the aspiring sustainable school, Fort Pienc, in Barcelona, suggests that places for growing food are praised by children not just because they are a valuable learning resource, but also because they help them to socialize and to demonstrate their skills and abilities (Brković

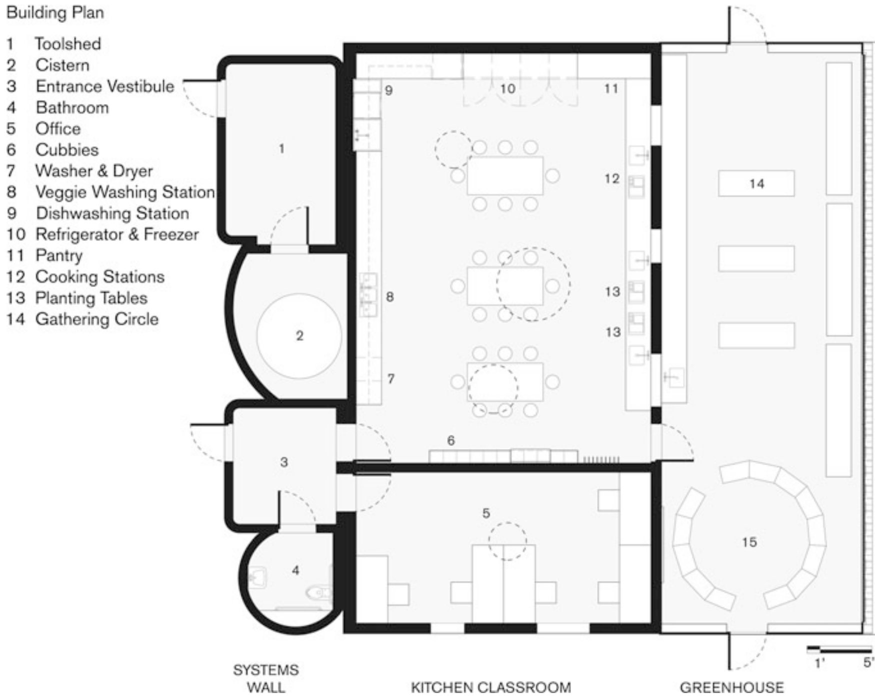

Fig. 1 Edible Schoolyard—spaces with technical equipment, kitchen and greenhouse (*Source* Drawing by Work Architecture Company)

Fig. 2 Edible Schoolyard (*Photo rendering and design* Work Architecture Company)

Fig. 3 Pupils planting in Fort Pienc School (*Photo* Marta Brković)

Fig. 4 Raised beds in Fort Pienc School (*Photo* Marta Brković)

Fig. 5 Dragon's breath corridor in Erika Mann School (*Photo* Jan Bitter; *Design* die Baupiloten)

2013, p. 102) (see Figs. 3 and 4). The garden in the school was envisaged as a place where a sense of community, both within the school and beyond, could be established and developed through joint food production. Pupils explained that raised beds are useful learning areas and social skills catalysts because activities around these resources are well-connected to the curriculum, with many teachers, parents and community members coming to work with pupils there.

It seems that growing and cultivating food brings pupils into direct contact with nature, supporting development of positive attitudes and skills for stewardship and sensitivity to their environment (Chawla 1998). Furthermore, joint food production and consumption seems to enable pupils to socialise and develop a sense of community. Lastly, when pupils have the opportunity to explore the full food growing cycle—from planting, cultivating, to consuming and composting—it can help to develop systems thinking, identified is a prerequisite for change towards a more sustainable society (Sterling 2003).

Celebrating Cultural Diversity: Developing Socio-Cultural Fluency

The design of a sustainable school should celebrate cultural diversity. As centres and icons of communities, schools have an opportunity to reflect local ethnicities and local character. Symbols of local culture provide inspiration and design opportunities. The Oprah Winfrey Leadership Academy for Girls and the "Dragon's breath corridor" in the Erika Mann School suggest ways in which cultural diversity might be celebrated through spatial design. For example, symbols of local Zulu and Tsoto cultures were carved onto the walls and ceilings of the Oprah Winfrey Leadership Academy for Girls (see web site http://www.owla.co.za/). In Erika Mann School, one wall of a corridor is clad with a highly light-reflecting polished steel (see Figs. 5 and 6), while on the other there are pictures of the children in the school, changed with each new generation coming in. A picture of each and every child is reflected in the polished steel on the opposite wall. In this way the diversity of the local community has been made visible through design, and the message is transmitted that the school is proud of every child, no matter what his/her age, gender, nationality or religion. Our interview with the architect suggested that this corridor makes pupils very proud (Brković 2013, p. 122). She explains, "the school could become a place of identification and support, as well as of multicultural communication" (Hofmann 2004, p. 121).

Interpretation of the rich cultural traditions of school students through design "is a mark of respect that tells students that where they come from matters as much as where they're going" (OWP/P Cannon Design et al. 2010, p. 127). Today, children live in multicultural worlds. They have to develop "sociocultural fluency" (Taylor 2009, p. 33) in order to understand and tolerate difference. Incorporating the symbols of local culture into the design of schools overtly supports this idea. According to Nicholson (2005), the environment can in this way symbolically

Fig. 6 Reflection of pupils' photos in Erika Mann School (*Photo* Jan Bitter; *Design* die Baupiloten)

transmit to children that they are to be "inspired, trusted, respected, loved, protected and understood" (p. 64). Iconographic messages inscribed in walls, seats varying in size, handles and light switches at children's height, colour-coded doors, and similar features are all physical elements of school buildings that communicate a variety of subtle messages to children. School design that builds on local cultural diversity is identified as significant in the context of sustainability, as it can contribute to creating a school community that is less excluding of disadvantaged people, disabled and newcomers, and more inclusive of all age, cultural and ethnic groups.

Managing the Environment: Learning About Saving Resources

Involving teachers and pupils in the operation and maintenance of lighting, heating, cooling, water, and energy production systems can support more effective operation

of those systems, reduced costs, and more comfortable life and work in the school generally (Taylor 2009). More importantly when these services are revealed and transparently, but safely, built into the school, they offer a valuable teaching tool. Integrating displays, signs and lighting can improve the learning environment and promote energy- and resource-saving (Shiver and Dale 2011).

To illustrate, an interactive kiosk in the heart of Stoddert Elementary School enables the ‘Energy Patrol’ and their classmates to monitor and analyse the school’s use of energy (Perkins Eastman and Ehrenkrantz Eckstut & Kuhn (EE&K) Architects 2010). The interactive whiteboards installed in all classrooms make the performance data available to all. Similarly, the toilets of Earlham Primary School have been redesigned to act as a three-dimensional textbook (Prue Chiles Architects undated) (see Fig. 7). The diagram at the entrance of the toilets explains water and electricity usage and incorporates readouts so that pupils can constantly monitor consumption of these resources. Nair and Fielding (2005, p. 69) and Taylor (2009, p. 153) suggest that engaging with various parts of such installations can support the development of multiple intelligences (Gardner 1983). For example, visual presentation of these systems through diagrams can support the development of visual/spatial intelligence; analysing and calculating the consumption of energy and water—their costs as well as the savings—can support the development of mathematical or logical intelligence; and reporting and presenting the results to peers supports verbal or linguistic intelligence. An understanding of these kinds of diverse learning opportunities can support students in finding their own preferred way to engage with such an installation.

In these two schools the physical attributes of learning environments present prompts or cues provoking learning. Taylor (2009) explains that “a cue or prompt in the physical world is a material or concrete object that invites students to learn not only about subject matter areas, but also leads them to an understanding of the underlying ideas, patterns, and the principles of the universe…” (p. 181). These schools teach by providing a rich experience for pupils. According to OWP/P Cannon Design et al. (2010), environments rich in positive stimuli present scenographies for interactive situations, learning through discovery, investigation,

Fig. 7 Entrance in the toilets in Earlham Primary School (*Photo and design* Prue Chiles Architects)

exploration, experimentation and play. Hertzberger (2008) explains that schools can initiate exchange of information, provoke questions and provide pupils with an opportunity to accumulate "interest and love for the richness of the world around us" (p. 46). In this way sustainable school buildings can be the best physical manifestation of good educational practice (Nair and Fielding 2005).

Conclusions

The ways in which school design addresses sustainability issues can directly or indirectly act pedagogically. The physical fabric can sometimes be a direct trigger for learning, as in the case of Earlham and Stoddart schools. Alternatively, it can indirectly or more overtly transmit a variety of subtle messages to pupils, as in the case of Oprah Winfrey Leadership Academy and Erika Mann School. Sustainable schools might support learning through demonstration, through symbols, or facilitation.

Although the layout, design features, technical and technological installations intended to be used as teaching tools necessarily emerge from the contextual challenges, they should also be in accordance with teaching and learning activities, methods, and approaches, so as to be pedagogically valuable. Our recent findings in Fort Pienc School align with Hes and Howards' (2010) findings, and suggest that facilities in school can be a valuable learning tool only when the learning activities around them are well-structured, connection to the curriculum is clear, and the roles and responsibilities of teachers, pupils and community members are well-defined.

Lastly, architects' designs and visions do not translate directly into the desired behaviors, engagements and learning experiences of occupants. Even when architects integrate design features and installations, which have pedagogical potential, such as solar water heaters, photovoltaic panels, and similar, they cannot assume that this is enough to provoke learning. Choreographed space uses, taking into account the space, the participants in the learning process, and the activities, need to be developed collaboratively with the occupants to allow teachers and pupils to skillfully and knowledgeably transform their school space according to their needs, wishes and teaching and learning methods. The transformation process during inhabitation can potentially become a learning process through which occupants explore, get to know and positively appropriate their environment. Building on the ideas of Brand (1995), such informed modifications, besides being pedagogically potent, are one of the keys to the sustainability of school design. Working in the fields of school design and built environment education, as both researchers and practitioners, we believe that the emerging principles above could help us to maximize the teaching potential of sustainable schools and assist us in using sustainable schools as a learning and curricular resource.

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Bibliography

Brand, S. (1995). *How buildings learn: What happens after they're built*. London: Penguin Books.

Brković, M. (2013). *Sustainable schools as the 'third teacher': Creating a design framework for sustainable schools in Serbia, learning from practices in England, Germany, and Spain,* University of Sheffield, Ph.D. thesis. http://etheses.whiterose.ac.uk/4513/. Accessed 28 Feb 2014.

Brundtland, G. H. (1987). *Brundtland report. Our common future. Report of the world commission on environment and development*. United Nations.

Burke, C. (2005). Play in focus: Children researching their own spaces and places for play. *Children, Youth and Environments, 15*(1), 27–53.

Chawla, L. (1998). Significant life experiences revisited: A review of research on sources of environmental sensitivity. *The Journal of Environmental Education, 29*(3), 11–21.

Cilento, K. (2010). *Edible schoolyard/work AC*. Resource document. ArchDaily. http://www.archdaily.com/47183. Accessed 28 February 2014.

Desmond, D., Grieshop, J., & Subramaniam, A. (2004). *Revisiting garden-based learning in education*. Rome: Food and Agriculture Organization of the United Nations.

DfES—Department for Education and Skills. (2006). *Design of sustainable schools: Case studies, schools for the future series*. Annesley: DfES.

Ford, A. (2007). *Designing the sustainable school*. Mulgrave: The Images Publishing Group.

Forman, G., & Fyfe, B. (1998). Negotiated learning through Design, Documentation and Discourse. In C. L. Edwards, L. Gandini & G. Forman (eds.), *The hundred languages of children: The Reggio Emilia approach advanced reflections* (2nd ed., pp. 239–260). London: Ablex Publishing.

Gaia Architects & Gaia Research (2005). *Design [and construction] of sustainable schools, Vol 1: Lessons from school buildings in Norway and Germany.* Glasgow: The Lighthouse on Sustainability.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books Inc., Publishers.

Gelfand, L., & Freed, C. E. (2010). *Sustainable school architecture: Design for elementary and secondary schools*. New Jersey: Wiley.

Gough, A. (2005). Sustainable schools: Renovating educational processes. *Applied Environmental Education and Communication, 4*(4), 339–351.

Hertzberger, H. (2008). *Space and learning*. Rotterdam: 010 Uitgeverij.

Hes, D., & Howard, P. (2010). Using construction of schools buildings as a novel approach to teach about sustainability. In *AUBEA 2010—Proceedings of the 2010 Conference of the Australasian Universities Building Education Association*, Jul 2010. https://www.academia.edu/415472/Using_construction_of_schools_buildings_as_a_novel_approach_to_teach_about_sustainability. Accessed 28 Feb 2014.

Hofmann, S. (2004). The Baupiloten: Building bridges between education, practice and research. *Architectural Research Quarterly, 8*(2), 114–127.

LPA Architects (2009). *Green school primer: Lessons in sustainability*. Mulgrave: The Image Publishing Group.

Montessori, M. (1966). *The secret of childhood*. Notre Dame, Ind: Fides Publishers.

Nair, P., & Fielding, R. (2005). *The language of school design: Design patterns for 21st century schools*. Minneapolis, MN: DesignShare.com.

Nelson, J., Martin, K., Nicholas, J., Easton, C., & Featherstone, G. (2011). *Food growing activities in school*. National Foundation for Educational Research Report. http://www.nfer.ac.uk/nfer/publications/OFGA01/OFGA01.pdf. Accessed 28 Feb 2014.

Nicholson, E. (2005). The school building as the third teacher. In M. Dudek (Ed.), *Children's spaces* (pp. 44–65). Oxford: Elsevier.

Orme, J., Jones, M., Kimberlee, R., Weitkamp, E., Salmon, D., Dailami, N., et al. (2011). *Food for life partnership evaluation: full report. Project report*. Bristol: University of the West of England.
Orr, D. (2004). *Earth in mind: On education, environment and the human prospect* (10th ed.). Washington: Island Press.
OWP/P Cannon Design, VS Furniture & Bruce Mau Design. (2010). *The third teacher: 79 ways you can use design to transform teaching & learning*. New York: Harry N Abrams Inc.
Perkins Eastman and Ehrenkrantz Eckstut & Kuhn (EE&K) Architects (2010). Stoddert elementary school. Resource document. http://www.eekarchitects.com/portfolio/20-sustainable-design/88-stoddert-elementary-school. Accessed 28 Feb 2014.
Prue Chiles Architects. (undated). *Earlham primary school*. http://www.pruechilesarchitects.co.uk/projects/earlham.html. Accessed 28 Feb 2014.
Scott, S. (2010). *Architecture for children*. Camberwell, Victoria: Australian Council for Educational Research Ltd.
Shiver, S. M., & Dale, J. R. (2011). Real Solutions for Integrating Sustainability as a Learning Tool. *Educational Facility Planner*, *45*(3), 11–13. http://media.cefpi.org/efp/EFP45-3Shiver-Dale.pdf. Accessed 28 Feb 2014.
Stanners, D., Bosch, P., Dom, A., & Gabrielsen, P. (2008). Frameworks for environmental assessment and indicators at the EEA. In T. Hak, B. Moldan, & A. L. Dahl (Eds.), *Sustainability indicators: A scientific assessment* (pp. 127–144). Washington, DC: Island Press.
Sterling, S. (2003). *Whole system thinking as a basis for paradigm change in education: Explorations in the context of sustainability*, University of Bath (Ph.D. Thesis). http://www.bath.ac.uk/cree/sterling/sterlingthesis.pdf. Accessed 28 Feb 2014.
Strong-Wilson, T., & Ellis, J. (2007). Children and place: Reggio Emilia's environment as third teacher. *Theory into Practice, 46*(1), 40–47.
Taylor, A. (2009). *Linking architecture and education: Sustainable design for learning environments*. New Mexico: The University of New Mexico Press.
UNESCO. (2009). *Bonn Declaration*. UNESCO World Conference on Education for Sustainable Development. 31 Mar–2 Apr 2009. Bonn, Germany. http://www.esd-world-conference-2009.org/fileadmin/download/ESD2009_BonnDeclaration080409.pdf. Accessed 02 June 2014.
Wade, R., & Parker, J. (2008). EFA-ESD Dialogue: Educating for a sustainable world. *Education for sustainable development policy dialogue no. 1*, UNESCO. http://unesdoc.unesco.org/images/0017/001780/178044e.pdf. Accessed 28 Feb 2014.

The Struggle for Educational Space in the Programme 'Building Schools for the Future'

Pat Mahony and Ian Hextall

Abstract This chapter is based on research undertaken from 2009–2012 into the former british Labour government's 'Building Schools for the Future' (BSF) Programme and its withdrawal by the Coalition government. This chapter begins with an introduction to BSF including a brief account of its origins within New Labour's political project and a summary of the main concerns raised about it. The authors identify the major policy shifts consequent on the newly elected Coalition government's cancellation of BSF in 2010. They end by presenting major reviews of literature on school architecture and building before considering emerging evidence on the impact of BSF, concluding that more research ought to be conducted on BSF schools in order to learn what combination of factors make a difference or not.

Keywords Policy · Community · Transformation · Equity · School building · Educational space

This chapter is based on research undertaken from 2009–2012 into the former Labour government's 'Building Schools For The Future' (BSF) Programme and its withdrawal by the Coalition government. We analyzed policy documents, case studies in six local authorities (LAs) and undertook 34 semi-structured interviews with policymakers and educationists. In the chapter, we first introduce BSF and its origins within New Labour's political project and summarise the main concerns raised about it. We then identify the major policy shifts consequent on the newly elected Coalition government's cancellation of BSF in 2010. We briefly discuss major reviews of literature on school architecture and building before considering

P. Mahony (✉)
Department of Education, University of Roehampton, London SW15 5PJ, UK
e-mail: p.mahony@roehampton.ac.uk

I. Hextall
University of Roehampton und Goldsmiths College London, 60 Old Shoreham Road, Brighton, East Sussex BN3 6GF, UK
e-mail: ianhextall@tinyworld.co.uk

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emerging evidence on the impact of BSF. We conclude that more research was needed on BSF schools in order to learn more about the significance of different factors.

BSF was an extremely ambitious programme introduced in 2003 by the former Labour Government to refurbish or rebuild all 3500 secondary schools in England and estimated to cost £55 bn by 2023. England was not alone in investing in school building (OECD iLibrary 2014). An account of the Portuguese experience, which parallels the trajectory of BSF in England, is presented by Marques et al. (2012).

When New Labour, under Tony Blair, came to power in 1997 after 18 years of Conservative government, they inherited a negative view of the public sector and "levels of poverty and inequality unprecedented in post-war history" (Hills et al. 2009, p. 2). This meant that "few Labour politicians chose to promote equality for fear of losing electoral support" (Hills et al. 2009, p. 8). Blair's 'Third Way' politics espoused "democratic socialism and liberalism" (Blair 1998, p. 1); democratic socialism was expressed in commitments to "equal worth", "opportunities for all", "community" and "responsibility", and [neo]-liberalism was evident in management and finance policies that continued the privatisation of and in the public sector. BSF clearly expresses Third Way principles in being a key part in New Labour's educational and social policy intended to make Britain "a more equal society" (Mandelson 1997, p. 7). It was never intended to be *just* about buildings; educationally, there was an accompanying change management programme and an overall commitment to community transformation. Initially, BSF focused on localities with high levels of deprivation and social need, primarily in urban contexts. In this sense it was intentionally redistributive, albeit, according to Hills et al. (2009), in a stealthy and quiet manner. There was also a requirement that each local authority (LA) project was to be highly consultative with local visions being discussed by governing bodies, LAs, parent groups, and school communities, including students. So principles of *transformation, redistribution, regeneration* and *participation* underpinned the BSF initiative. Meanwhile its implementation procedures and financing arrangements were overtly neo-liberal. For example, the management of projects was by Local Education Partnerships (LEPs), 80 % of which were owned by the private sector, whilst the Private Finance Initiative was utilised to fund new buildings (Mahony and Hextall 2013). Having worked in decaying inner-city schools, we strongly supported the material investment in education and communities that BSF represented, but problems with the policy emerged as our research progressed (Mahony et al. 2011).

Problems with BSF

Present in the original BSF 'vision' were a range of aims and benefits including: providing modern facilities for staff and pupils, supposedly leading to improved standards and motivation; local community involvement in design and use of schools; transformation of education and communities and developments in new

models of funding. These lacked clear focus. The 7-stage implementation process was deemed to be expensive, bureaucratic, complicated and wasteful. It consisted of:

1. *Pre-engagement* assessment of the LA's submission;
2. *Strategy for change* (*SfC*) documents are developed;
3. *Outline business case*—the SfC vision is further developed;
4. *Preparation for procurement*—LAs aims are set out, guided by over 100 official documents on all aspects of BSF procurement and contracting;
5. *Procurement*—begins with publication of a notice in the *Official Journal of the European Union* (OJEU). The LA selects potential bidders, then a preferred bidder. A joint venture is set up between the LA, a consortium of private sector contractors and a government company. LEPs deliver BSF projects;
6. *Financial close*—the final business case is submitted and, once approved, rebuilding and refurbishment of schools can begin;
7. *Operational LEPs and repeat waves*—once schools are in use, outcomes are assessed against the planned objectives for the project, through mechanisms such as 'post occupancy evaluation'.

Headteachers became frustrated with project delays. Concerns were raised over whether the public/private project management arrangements offered value-for-money and whether there were adequate mechanisms of governance and accountability. BSF involved large sums of public money being paid to private sector supply chains which were difficult to track. It continued the trend towards privatising public services, resulting in tensions between demands of commercial confidentiality and local democratic engagement underpinning initiatives of 'community transformation'. The Labour Government was dealing with some of these issues but BSF was cut short in May 2010 when it lost the election and a new Conservative and Liberal Democrat coalition was formed.

The 2010 General Election and Subsequent Policy Developments

The Conservative Party (2007) had already announced in 2007 that they would re-allocate money from BSF to fund new state schools (Academies and 'free' schools) (Conservative Party 2007), independent of LAs. Over 700 BSF school projects were cancelled in 2010 resulting in more than £200m being wasted by LAs on preparatory work for cancelled BSF projects (Dunton 2010). There was much controversy and a Judicial Review requested by six LAs judged that the Minister for Education (Michael Gove) had failed to consult properly and to take adequate account of equalities implications. The judge said that the way projects were stopped was "so unfair as to amount to an abuse of power" and that failure to consider the impact on equality was "glaring and very telling" (Shepherd 2011). In fact, the Minister's department *had* undertaken an equalities impact assessment revealing that there were "statistically significant differential impacts" for pupils

who qualified for free school meals, and/or had English as an Additional Language and/or who had Special Educational Needs (Trades Union Congress 2010). However, the Minister did not restore any BSF projects.

The James Review

A Review was commissioned and funded by the Minister and published after a year's delay. It recommended that the main criteria for school building should be "the need for pupil places and the condition of the local school estate" (James 2011, p. 6). Other recommendations focused on efficiency, speed, standardisation of drawings and specifications, and centralised procurement and management. BSF, although 'not only about buildings' had been intended as an ambitious venture in the world of school design and contracting. The investment was meant to produce 'exemplary designs' and facilities aimed at building schools fit for the future, generating benefits for the commercial sector, for jobs and training, for ameliorating under-achievement and deprivation, for enhancing social mobility and for regenerating both local and national economies. These assumptions and aims were questioned at almost every level in the 'findings' of the James Review.

There was a complete denial of the educational and community *transformational agenda*; the Review claimed that there was no consistent definition of the meaning of 'transformation', and that BSF was overambitious, producing overspend against an agenda which was neither realistic nor desirable. Terms such as 'overambitious', 'overspend', 'realistic' or 'desirable' were not defined.

The Review also moved away from local *consultation or accountability,* which was claimed to be overly disruptive, uneconomical and time-consuming. Rejecting the importance of context or of local democratic engagement in the ownership and governance of schools, James proposed establishing a 'central body' entitled the Educational Funding Agency (EFA) within the Department for Education (DfE), to procure and manage contracts for building projects. The Royal Institute of British Architects (RIBA 2011) expressed concerns about these developments, believing it to be a mistake to reject any form of user engagement. RIBA amongst others was also critical of the Review's espousal of building 'standardisation' in pursuit of cost efficiency. Perhaps such critical reception provoked the shift to the concept of Baseline Designs. In their Progress Update, the Review Group acknowledged the "differing requirements by site and some reluctance to impose a very homogeneous look and feel across the estate" (James and Brown 2013, p. 18). As a result they said:

> Baseline Designs do not go as far as the original Review perhaps envisaged. At present, the designs form a starting point for discussion rather than the intended off-the-shelf design which contractors simply build from. Contractors are not forced to use the designs but are encouraged to improve on them (James and Brown 2013, p. 18).

In January 2012 following the Review's recommendation that capital allocation should be made using objective information on the *need* for pupil places and on the *condition* of the local school estate, *Tribal,* a major private technology company was awarded the contract to collect these data on the existing stock of 27,000 school buildings (PfS 2012). This exercise caused LAs difficulty in effectively handling their school estate because of uncertainty about the criteria on which the data would be interpreted. These concerns were tested in May 2012, when schools were told whether they had been successful in bidding for money under the new Priority School Building Programme. Of the 587 schools that applied, 261 schools received money aimed at rebuilding those in the worst condition. Of these the Minister said "42 schools were being prioritised because they were in greatest need" (Harrison 2012). Councillor David Simmonds wrote: "This funding […] will go some way to addressing the problems facing some of our most dilapidated schools. But more than 300 run-down schools have been left in limbo. […] the condition of some schools is so bad it's getting in the way of providing a good education" (LGA 2012). There remains uncertainty as to how these new procedures will be enforced and the criteria according to which they will be implemented. However, in the current climate of public spending austerity, there is little doubt that cost reduction is likely to be given first priority. What this will entail in terms of social justice and equity is that there will be a three tier school estate consisting of BSF new builds, cheaper more standardised new builds and those remaining in poor condition.

Buildings and Their Effects: The Evidence Pre-BSF

The debate in England over the establishment and purposes of BSF in many ways reflects a historical and international discussion about the role of school buildings in the achievements and opportunities of young people and their communities. Whilst there seems to be some consensus about the important contributions of school buildings, little clear evidence of their precise nature and impacts has been available until recently, when a good deal of effort has gone into clarifying what factors comprise 'good' educational spaces in the form of three large-scale literature reviews. The OECD pilot study focused on:

> Capacity of the space to increase access and equity to education […] [and] Capacity of the space to improve educational effectiveness and promote acquisition of key competencies" (OECD 2009, p. 13).

Similarly, in Victoria Australia, Blackmore et al. (2011) examined the connections between learning spaces and student learning outcomes. Both the OECD and Blackmore et al. refer to the diverse nature of the tangible and structural/relational aspects of educational spaces, which need to be taken into account in evaluating impact on 'outcomes'. Blackmore et al. (2011, p. iv) say:

> Claims in the literature about the possible effects of various aspects of learning spaces on student learning are often not substantiated empirically. The review is therefore as much about what is missing from the research as it is about synthesising evidence to support connections between learning spaces and student outcomes.

Similarly the OECD Report (2009, p. 17) stresses that: "there is little existing research that focuses on how educational spaces are used as tools to facilitate the changing needs and demands of curriculum and pedagogy". Nonetheless it continues: "However a growing body of literature *highlights the need for learning environments to better respond to these needs and demands*" (our emphasis).

Woolner et al. (2007, p. 47) also conclude that:

> […] while the research indicates the parameters of an effective environment, there is overall a lack of empirical evidence about the impact of individual elements of the physical environment which might inform school design at a practice level to support student achievement.

In contrast, there seems to be little dispute about the negative impact of poor environments upon learning outcomes. Higgins et al. comment (2005, p. 36):

> Physical elements in the school environment can be shown to have discernible effects on teachers and learners. In particular, inadequate temperature control, lighting, air quality and acoustics have detrimental effects on concentration, mood, well-being, attendance and, ultimately, attainment. […] Beyond the level of meeting basic standards, there is not enough evidence to give clear guidance on how to set priorities for funding, or to evaluate the relative value for money of different design initiatives.

Here we find a definite focus on the clear impact of 'tangible' factors, which play a dominant part in the debates amongst designers and architects. In their conclusion, Blackmore et al. (2011, p. 38) stress the need to move beyond questions of 'architectural determinism', by highlighting the critical role of teacher professional learning and pedagogy, and by foregrounding "issues of identity, ownership and agency in relation to use of space and time, as well as the intangibles that include the affective, cognitive, and social aspects of teaching and learning, and organisational change".

Buildings and Their Effects: The Evidence Post BSF

Evidence about the impact of completed BSF schools on the performance, attitudes, and morale of learners and the overall impact on patterns of teaching and learning is not straightforward; findings so far on impact seem to vary depending on what the evidence is about and when it is collected.

On its own the widely cited National Foundation for Educational Research (NFER) evaluation (Rudd et al. 2008, p. 28) which reported finding "a good deal of evidence to indicate that student attitudes had become more positive after the move into the new school buildings" amounts to very little. The evaluation focused on one school very shortly after its opening and was based on questionnaires to two

year groups of pupils and interviews with only eight teachers. However, put with other reports, the findings become significant. For example, evaluations commissioned by the Labour Government conducted by PricewaterhouseCoopers LLP (PwC 2008, 2009, 2010) provided growing evidence of positive outcomes. For example, the third and final report (PwC 2010) suggested:

- BSF investment appears to be impacting on staff in terms of continuing professional development (CPD); staff morale, recruitment and retention; and the teaching and learning environment (ibid., p. 61) and,
- there are improvements in pupils' attitudes, aspirations and behaviour (ibid., p. 64).

The report makes it clear however, that:

> […] the extent and rate at which BSF investment will impact, is dependent on the quality of teaching and learning and the leadership in place, both prior to and in the early stages of the BSF. […] new BSF school buildings will not, on their own, impact significantly on pupils' attitudes, aspirations, attainment and behaviour (ibid., p. 69–72).

An analysis of pupil profile and performance data was carried out on over 1000 schools involved in the early stages of BSF (PwC 2010), which would enable more long-term comparable evidence to be collected, but to our knowledge this has not been utilised in any longitudinal study. Finally, in 2012, a report (PfS 2010) came to light which had been prepared two years earlier, just after BSF had been cancelled. Ministers were accused of suppressing for two years a report demonstrating that "schools rebuilt under BSF showed 'significant' improvements in exam results and declining truancy". The report concludes:

> There are clear patterns of improvement that compare favourably with both local and national data. The patterns are significant and need further investigation to provide explanations about the impact of the BSF process. […] the evidence of impact is over too short a period of time to be secure and data will need to be examined annually until at least one cohort of students has passed through each school. […] The patterns of improvement in this sample of schools are particularly significant because of the low starting point for many of the schools (Vasagar 2012, p. 6).

During our own research in six case-study LAs 34 interviews were conducted with a range of personnel. We gathered accounts of: processes of designing schools; the impact of BSF on the community, parents, teachers and students; how sceptics 'played the game'; on the need to systematically collect evidence and on the kind of evidence it is possible to collect. In the final months of our project we were able to visit four open BSF schools and a further three LAs to explore the question of impact in greater depth. Here we cannot do more than summarise some of our findings (cf. Mahony and Hextall 2013).

A picture emerged of BSF having made a positive impact in relation to a range of stakeholders including students, school leaders and staff, and LA officers. It was claimed that student behaviour, achievement and attendance had improved. The 'climate for learning' was said to be better; teachers could see and help each other. Staff attendance and teacher recruitment improved. Parents were reported to be

more positive about the new school, but community involvement (let alone transformation) had yet to develop. Involvement in designing BSF schools (for as little as 10 min per week) was said to be important in encouraging school staff to explore and re-evaluate their educational values, enabling architects to express these in and through buildings. Education professionals contributed a depth of experience on pedagogical and social issues born of many years of 'living a school'. This had many dimensions, obviously including teaching and learning. We recognise the limitations of our case study evidence in relation to what it 'proves' about the success of BSF that is measured. What could not be disputed was the enthusiasm, appreciation and pride expressed by teachers and students alike as we were shown around their schools.

Conclusion—The Need to Collect Evidence

One of the themes that emerged strongly from all but one of our interviews concerning the impact of open BSF schools was the need to collect evidence in a systematic way. One LA officer disputed this claiming, that evidence was irrelevant. Human rights, he said dictated that everyone should have a good environment for learning and working.

This returns us to two original aims of BSF, namely, achieving educational and community transformation to rectify wildly different levels of basic provision between different communities and promoting the rights of those communities to have a say in the nature of community and educational facilities in their areas. Such values do not underpin the current Government's policies, which have been widely criticised for targeting the vulnerable and the poor. Since the Conservatives had already announced in 2007 their intention to use BSF money to fund Academies and Free Schools, its withdrawal seems to have been more ideological than economic, especially since at the point that BSF was cancelled, empirical evidence was emerging that could have improved implementation and cut costs without ending BSF altogether. The Education Minister did not initiate research that could inform future school rebuilding even though there is much to be learned from post-occupancy evaluations. It is important to conduct further research into BSF schools, if for no other reasons than to maximise the effectiveness of public expenditure, and to determine whether BSF made a difference, to whom and in what ways.

Such research would need to be: large scale, using existing data-sets of centrally-recorded measures of school performance and long term to ascertain whether improvements reported are sustained. It should include social development using a variety of data on, for example, exclusions, staff and student attendance, records in incident books, and parental involvement, and incorporate in-depth qualitative school research to try to find out why and how change occurred (or did not). Undoubtedly any large-scale research project would be expensive and some might argue that in times of austerity it cannot be afforded. But, how can we not

afford it if we care about finding the best way to school a nation? For without a much richer and detailed picture of the different relevant influences that maximise the benefits of BSF, an opportunity will be lost to explore the ingredients of success for schools in the future.

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Bibliography

Blackmore, J., Bateman, D., Laughlin, J., O'Mara, J., & Armanda, G. (2011). *Research into the connection between built learning spaces and student outcomes. Literature review*. Paper No. 22, June 2011. Melbourne: State of Victoria.

Blair, T. (1998). *The third way: New politics for the new century*. Fabien Pamphlet 588. London: Fabien Society.

Conservative Party. (2007). *Opportunity agenda, policy green papers no 1: Raising the bar, closing the gap*. London: Conservative Party.

Denton, J. (2010). Councils' lost BSF spending tops £200m London. Local government chronicle, 20 July 2010. http://www.lgcplus.com/briefings/services/childrens-services/councils-lost-bsf-spending-tops-200m/5017383.article. Accessed 19 Aug 2011.

Harrison, A. (2012). Priority school building programme plans announced. *BBC News*, 24 May 2012. http://www.bbc.co.uk/news/education-18190016. Accessed 23 Aug 2012.

Higgins, S., Hall, E., McCaughey, C., Wall, K., & Woolner, P. (2005). *The impacts of school environments: A literature review*. London: Design Council.

Hills, J., Sefton, T., & Stewart, K. (2009). *Findings Informing change: Poverty, inequality and policy since 1997*. York: Joseph Rowntree Foundation.

James, S. (2011). *Review of education capital*. London: DfE.

James, S., & Brown, E. (2013). *Review of education capital: Progress update*. London: DfE.

Local Government Association. (2012). *Gove unveils school rebuilding decision*. http://www.local.gov.uk/media-watch/-/journal_content/56/10180/3581677/NEWS. Accessed 16 Feb 2014.

Mahony, P., & Hextall, I. (2013). 'Building schools for the future': 'Transformation' for social justice or expensive blunder? *British Educational Research Journal*, *39*(5), 853–871.

Mahony, P., Hextall, I., & Richardson, M. (2011). 'Building schools for the future': Reflections on a new social architecture. *Journal of Education Policy, 26*(3), 341–360.

Mandelson, P. (1997). *Labour's next steps: Tackling social exclusion*. Fabian Pamphlet 581. London: The Fabian Society.

Marques, J., Veloso, L., & Sebastião, J. (2012). How to rebuild a secondary school: Space, knowledge and education. In B. Boufoy-Bastick (Ed.), *Cultures of educational policy*. Strasbourg: Analytrics.

OECD. (2009). *International pilot study on the evaluation of quality in educational spaces (EQES): User manual final version*. Paris: OECD, May 2009.

OECD iLibrary. (2014). *CELE exchange, centre for effective learning environments*. www.oecd-ilibrary.org/education/cele-exchange-centre-for-effective-learning-environments_20727925. Accessed 27 Jan 2014.

Partnership for Schools (PfS). (2010). *BSF benefits-realisation-report for the board*. London: PfS.

PwC—PricewaterhouseCoopers LLP. (2008). *Evaluation of building schools for the future—1st annual report*. London: DCSF.

PwC—PricewaterhouseCoopers LLP. (2009). *Evaluation of building schools for the future—2nd annual report*. London: DCSF.

PwC—PricewaterhouseCoopers LLP. (2010). *Evaluation of building schools for the future—3rd annual report.* London: DCSF.

RIBA. (2011). *Implementation of the 2010–11 review of education capital (The James review) RIBA response.* London: RIBA, Oct 2011. http://www.architecture.com/Files/RIBAHoldings/PolicyAndInternationalRelations/Policy/RIBAresponseImplementationofReviewofEducationCapital.pdf. Accessed 27 Jan 2014.

Rudd, P., Reed, F., & Smith, P. (2008). *The effects of the school environment on young people's attitudes towards education and learning: Summary report*. London: National Foundation for Educational Research.

Shepherd, J. (2011). Gove loses court battle over cancelled school building projects: Judge rules cancellation of school building programme an 'abuse of power'. The guardian, 11 Feb 2011. www.guardian.co.uk/education/2011/feb/11/gove-schoolbuilding-court. Accessed 19 Aug 2011.

Trades Union Congress. (2010). *Touchstone blog CutsWatch 241. Equality Impact Assessment of Stopping Building Schools for the Future*. London: Trades Union Congress.

Vasagar, J. (2012). 'Buried' report praised labour's school building programme. http://www.guardian.co.uk/education/2012/jul/05/buried-report-labour-school-building. Accessed 23 Aug 2012.

Woolner, P., Hall, E., Higgins, S., McCaughey, C., & Wall, K. (2007). A sound foundation? What we know about the impact of environments on learning and the implications for Building Schools for the Future. *Oxford Review of Education, 33*(1), 47–70.

Part II
Education and the Neighbourhood

The Interrelationship Between Education and Urban Development

Frauke Burgdorff

Abstract Changes in social policy have changed the significance of educational establishments, and especially schools, with regard to the future of urban districts and cities as a whole. This piece takes up the subject of trends in the education system and the effect they have on the city, seen from the point of view of urban development. It focuses on the idea that in cooperation between school development and urban development, especially, various options can be activated leading towards a less segregated urban society offering more equal opportunities. The basis for this is sociospatial data shedding light on integrated, strategic location planning for schools, and neighbourhood-based educational work. The aim of municipal politics must be to achieve an integrated urban development policy which, alongside conventional spatial subjects (e.g. transport, the environment, housing), also examines education.

Keywords Neighbourhood development · School location planning · Integrated urban development · Urban development policy · School construction · Educational work

In the 1950s, the urban planner and architect Rudolf Schwarz asserted in his paper "Das Neue Köln" (The New Cologne) that schools would be the new centre-points of neighbourhoods, replacing churches and social clubs in this role: "The true supporting structure of a settlement thus appears to us to be neither the church nor the social club, but the school" (Schwarz 1950, p. 20). His theory anticipated two opposite tendencies, which today still greatly affect urban development. Schools are gaining in importance as the central focus of community life in neighbourhoods and districts. They leave their mark on how the district is seen as a place to live; their character and quality open up paths for district development, though blocking others. Not only the churches but also the parish halls and community centres are

F. Burgdorff (✉)
Raumplanung, Montag Stiftung Urbane Räume gAG und Urbane Nachbarschaft Samtweberei gGmbH, Adenauerallee 127, 53113 Bonn, Germany
e-mail: f.burgdorff@montag-stiftungen.de

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plummeting in their significance as places of community life and as the central focus of urban districts. In some cases Christian belief is not the only constitutive focus of German municipalities. In other cases the number of district libraries, community halls and youth centres is declining.

Tasks previously carried out by churches and the municipality (work with children, youth and old people) will be spread across a number of shoulders. This does, of course, include services provided by all the different denominations, by clubs and by community-run libraries. The only broad shoulder on which the people in a district can generally lean that is not linked to any specific faith or social status will in future be the kindergartens and primary schools, and in some cases secondary schools. The thinning, changing care environment has changed the meaning of schools with regard to the development of districts and of the town as a whole.

Three Trends with Consequences for Town District Development[1]

First of all, educational qualifications have gained a great deal of significance as the basis for individual development. Whereas, in the 1990s, it was still just about normal to gain the lowest school qualification (*Hauptschulabschluss*) and enter into a regulated profession, or to get an intermediate school leaving certificate (*Realschulabschluss*) and get an administrative job, today employers generally look for the highest qualifications possible. This means that those with the highest school-leaving qualification (*Abitur*) are also entering skilled trades and administrative work. This has so much sidelined the lowest link in the chain—*Hauptschule*—that its pedagogical qualifications are no longer recognised, or cannot be recognised. They have become a "leftover" school. As there is unfortunately no sign of more inclusive school systems being generally introduced in Germany over the years to come, urban renewal and urban development measures continue to be based on a divided school system. However, the type of school at the centre of a neighbourhood will make all the difference, as it could also decide which families choose to move closer to the neighbourhood, and which specifically choose not to.[2]

Secondly, more and more schools are becoming *Ganztagsschulen*, a German extended or full-service school. The primary schools, especially, are taking this step

[1]Of course, there are a great deal more trends currently changing the relationship between the school and the town. Ulrich Paßlick (2012), head of the planning department in Bocholt, presented a good overview for the project "Schulen planen und bauen" (Planning and Building Schools) (Paßlick 2012).

[2]Unfortunately, there has been no extensive, convincing empirical research in Germany into the connection between people's choice of residential location and available schools; thus, in this field, recourse must be sought in discussion and descriptions from practice.

deliberately not only to offer working parents attractive services but also to make use of the opportunities provided by rhythmic all-day activities combining project-based learning with a mixture of instruction and self-learning. This is all much easier to fit into a whole day than into a minutely packed morning timetable with 45-minute lessons. Some secondary schools are entering into all-day schooling almost without realising it; simply stretching out their timetable into the afternoon because of the large amount of teaching material to get through. Ideally, the *Ganztagsschule* improves learning and rids families of the stress of learning at home. Less ideally, it may raise the pressure on children and young people's schedules: they have hardly any time left to take part in normal leisure activities of their choice. Both results are having major effects on the districts and their institutions. Clubs are desperate for young members, or offering to work in partnership with schools; if the schooling is organised traditionally, over the entire day, the city is empty of children and young people.

Finally, the segregation of social spaces is an increasing burden on the school system, and in some places it is completely overwhelmed: "Mainstream" schools are coming across "exceptions" which are now far from being the exception. In 2009, for example, two years before starting school, 40 % of children in the Cologne district of Kalk were not able to speak enough German to attend primary school.[3] This startling figure, or something similar, can be found in other German cities. This is well beyond schools' capabilities, and additional state support is not sufficient to help children and young people during and at the end of their schooling to get an equal, satisfactory position in society and on the labour market. This is thrown into sharp relief by a report on local educational funding from the district of Hasenbergl in Munich, quoting the following extract from the expert interviews carried out in 2010, describing the situation: "Our main educational problem is that the children get zero stimulation early on. They arrive at kindergarten and the staff in Hasenbergl do a great job, but they simply cannot make up for what has been missed out in the first three years. And that is the problem, which drags on into primary school. We have to teach the children the basics first. Other schools, in other parts of town, are at a totally different level right from the start" (Landeshauptstadt München 2012, p. 31).

[3]"Altogether, in 2009, 2848 children who were due to start school two years later were found to be in need of additional language support. The city total was thus, as described before, 29.7 %. If this percentage is seen at the level of districts, it is clear that these values fluctuate sharply. While the district of Lindenthal has the lowest percentage, at 10 %, the district of Kalk, by contrast, has the highest need for language support (40 %) among 1044 children tested in that district. Kalk is closely followed by Chorweiler, where 39 % of the 803 children tested have additional need for language support" (Stadt Köln 2011, p. 8).

Cooperation Between School and City Planners as the Basis for Change

Of course, not all issues related to inequality can be answered via the education system, and certainly not on a municipal level. Yet there are options, which can be applied at a municipal level in order to (as described by one strategic positioning taken by urban planner Michael von der Mühlen) at least make the most of the opportunities which do lead in the direction of a less segregated urban society with a fair equality of opportunity.

Data to Act on

In 2008, the city of Mülheim an der Ruhr joined up with the Centre for Interdisciplinary Regional Studies (ZEFIR) to present an analysis of social spaces with the subheading "Daten für Taten" (Data to act on) (Ernst 2008). Since then, this has formed the central basis on which the municipalities equip and support kindergartens and crèches in different parts of the city. A deliberate focus was placed on the educational status of children entering crèches and kindergartens.

The then head of the Department of Education and Social Affairs based the plans on the idea that encouraging younger children's linguistic and motor skills by supporting childcare institutions and families was crucial to the possible success of individual educational paths. The aim was (and is) not to put an end to segregation by means of education, but to use early-years education to offer chances for individuals to escape a socio-economic "prison". In the educational development plan for 2015/16 set out in 2011, the concise conclusion was even expressed that "inequality should be treated unequally", specifically meaning excess pupil numbers not being reduced, or special support packages being put together for primary schools in those districts (Stadt Mülheim 2011).

Location Planning for Educational Institutions

Classic school location planning is based on extrapolating trends in pupil numbers. It is rarely linked to municipal education topics (youth work, adult education, local support systems). The city of Cologne has taken an initial, innovative step by preparing an integral plan for youth welfare and school development. It does, at least, break down the walls between school institutions and youth welfare services. The analysis also makes use of data on social spaces, describing the challenges facing the city's districts. However, there is little that municipalities can do to actually react to these challenges. There are only few additional means of supporting schools (social workers, equipment); no money is available for new youth facilities. On top of this, the districts, which are capable of articulating themselves

politically can generally argue their way past the rankings set up by youth welfare and school development planning. As a result, of all places, it is the districts, which cannot speak up for themselves which end up with less educational investment than before. This does not render the analysis itself worthless, but it is clear that such integrative planning only gains strength when at least some requirements for implementation are in place. It also needs a culture of negotiation in urban society, which allows investments in education to be in line with needs. After all, in the medium and long term, the already valuable analysis of social spaces could be complemented by data of educational provision, if the municipalities had the chance to manage those resources. Some municipalities are their own worst enemies in this regard, spreading responsibility for external school development (school administration offices, equipment, maintenance and facility management, construction and repair) across different authorities and departments. In the federal state of North Rhine-Westphalia, internal school development is the responsibility of the federal state or provincial governments, which do not necessarily feel tied down to the results of municipal development planning. Thus, in addition to the vertical stratification of authorities and departments on a municipal level there is also a horizontal stratification between the federal state, provincial government and municipality. It creates an even greater obstacles to the implementation of what is actually the excellent idea of reacting to specific sets of problems with specific programmes.

Neighbourhood-Based Educational Work

Over recent years, the city of Munich (see also Schweppe and Brehmer in this volume) has made a huge leap towards giving a further, pragmatic form to link neighbourhood/social space and education. One key foundation for this is the city's development planning department, which does not see itself as an extension to the City Planning Office but instead, under supervision of the Mayor of the city, it develops goals and observes indicators on all topics touching on urban policy. This means that trends in educational opportunities specific to social spaces can be monitored and evaluated in the medium term. Steps can be then taken to counteract them.

On this basis, however, plans are not only made for school equipment and locations; targeted educational strategies are also set out for each district, reacting to local needs. Here, the report on district-based educational work in Hasenbergl, in the north of Munich, is particularly important. Both the analysis of the initial situation and the resulting conclusions and consequences extend well beyond the education sector (Landeshauptstadt München 2012). The report examines life in the district as a whole in order to derive strengths, weaknesses and strategic goals. Importantly, this neighbourhood-specific approach is an especially direct reaction to the immediate needs of the people in the district and the institutions, which take care of them. In Hasenbergl, more than 30 target-group-specific projects were developed on this basis and new, transparent cooperation structures developed,

which will hopefully also have a medium-term effect on local educational opportunities.

Education as a Task for Local Politics

In its last two statements on education policy, the Association of German Cities called for municipalities to establish active educational monitoring and management to meet the challenges posed by unequal educational opportunities in the city, and to make more effective use of education as a resource to add to a location's qualities (Deutscher Städtetag 2012). This call for action is, of course, addressed at state institutions and the federal and state governments. More resources and more *subsidiarity* are required in education. However, another addressee must be municipalities themselves. If, after all, in the worst case, learning and childcare provisions involve inappropriate profiles in suboptimal locations. At the end pitfalls in cooperation between municipal administration departments will eventually end up hitting learners. The municipalities setting a strong pace in this field are encouraging a view of integrated urban development policy which, in future, encompasses not only the original spatial themes of transport, the environmental or housing development, but also the retail sector and, finally, education as a key driving force behind processes of urban development and renewal.

Bibliography

Deutscher Städtetag. (2012). *Bildung gemeinsam verantworten. Münchener Erklärung*. Munich.

Ernst, U. (2008). *Daten für Taten. Innovative Ansätze in der kommunalen Sozialberichterstattung.* Vortrag auf einer Fachveranstaltung auf Einladung des Ministeriums für Arbeit, Gesundheit und Soziales des Landes NRW. http://www.mais.nrw.de/sozber/sozialberichterstattung_nrw/Veranstaltungen/LEV_Muelheim.pdf. Accessed 31 Mar 2014.

Landeshauptstadt München. (2012). *Lokales Bildungsmanagement, Lokale Bildungsberatung im Stadtteil.* Zwischenbericht. Auszug als Anlage zum Beschluss des Ausschusses für Bildung und Sport des Stadtrates vom 04 Jul 2012. http://www.muenchen.de/bildungslokale. Accessed 01 Apr 2014.

Paßlick, U. (2012). *Schulbau in Bocholt.* Montag Stiftung Jugend und Gesellschaft. http://www.schulen-planen-und-bauen.de/download.html. Accessed 01 Apr 2014.

Schwarz, R. (1950). *Das Neue Köln*. Cologne: Ein Vorentwurf.

Stadt Köln. (2011). Sprachstandsfeststellung zwei Jahre vor der Einschulung – Ergebnisse 2009 und 2010 in Köln. *Kölner Bildungsmonitoring 1/2011*. Cologne.

Stadt Mülheim an der Ruhr. (2011). *Bildungsentwicklungsplan für die Schulen der Stadt Mülheim an der Ruhr 2015/16.* Mülheim.

‘Spielräume’—Beyond the Distinction Between Education and Urban Development

Fabian Kessl and Christian Reutlinger

Abstract This chapter views education and urban development as two systematically interrelated processes—even when this in no way represents the state of the art in current planning, policymaking, or scientific discussions. On the contrary, this multidisciplinary context first has to be continually created anew and developed systematically. This has been implemented both theoretically and empirically with the pilot project *SPIELRAUM*. This programme initiated by the *Deutsche Kinder- und Jugendstiftung* integrates the assumption that educational and urban development processes are structurally entangled. It focuses on converting or redesigning concrete big-city locations as recreational spaces for youth (e.g., soccer, skateboard, or basketball grounds) as the starting point for local SPIELRAUM activities in Austria, Germany, and Switzerland. However, this physical-material development factor is linked right from the start with a conception of these sites as education spaces. Finally, central summary ideas for further discussions on designing projects in the context of education and urban development are drawn from the scientific evaluation process.

Keywords Acquisition · Education spaces · Planning · Interdisciplinarity · Scientific process evaluation · Urban development

In German “Spielräume” covers two meanings in one: free spaces and recreation areas. We use the German term to symbolize the double meaning.

This chapter is based on the introduction and summary of the book *Urbane Spielräume: Bildung und Stadtentwicklung* [Urban free spaces: Education and urban development] edited by both authors and published by Springer VS in 2013 (Kessl and Reutlinger 2013a).

F. Kessl (✉)
Fakultät für Bildungswissenschaften, Institut für Soziale Arbeit und Sozialpolitik,
Universität Duisburg-Essen, Universitätsstraße 2, 45117 Essen, Germany
e-mail: fabian.kessl@uni-due.de

C. Reutlinger
Institute of Social Work (IFSA), University of Applied Sciences St. Gallen (FHS),
Rosenbergstrasse 59, Postfach, 9001 St. Gallen, Switzerland
e-mail: christian.reutlinger@fhsg.ch

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It is still unusual to view education and urban development as two systematically interlinked processes. Symbolically, this can already be seen in both the administrative and disciplinary classifications of the corresponding fields of policymaking and research in German-speaking countries. Educational policy is located mostly in a separate department or in a department together with research or sometimes also youth, family, and social policy. In contrast, urban development is generally part of a department responsible for physical infrastructure. In Germany, this is revealed in the current distribution of responsibilities across federal ministries (Federal Ministry of Education and Research [BMBF] and Federal Ministry for the Environment, Nature Conservation and Nuclear Safety [BMUB]). First exceptions to this, such as the recently founded Faculty "Education, Architecture, Arts" at the University of Siegen, only confirm the general rule.

This administrative and institutional separation is also matched by a separation between individual specialist discourses. One expression of this is the classification of university departments and faculties into educational science, social work, or educational and cultural sociology on the one side and urban, regional, and land-use planning along with architecture on the other. The disciplinary communication structures follow corresponding patterns: There are only discipline-specific specialist journals and separate disciplinary publication structures but also parallel discourses—each remaining firmly within its own referential context and read only by those within their own discipline without any attention being given to what others are doing beyond their disciplinary borders.

Nonetheless, not only educational, social, and cultural sciences but also urban planning repeatedly examine the same objects. This can be seen in the discussions on the need for participation in urban space and how it should be promoted. Discussions in educational science along with those in social policy and the sociology of youth address such issues as adolescent acquisition practices, social-space-related informal youth education, or resident activation, whereas the urban development discussion deals with them under headings such as participation procedures or in the context of construction.

In our opinion, these parallel perspectives are not the problem as such, because interdisciplinarity can only emerge when there are different disciplines to start with. Nonetheless, we consider that the failure to engage in discussions that transcend administrative and disciplinary borders turns all too easily into a narrowing of perspectives—a narrowing that repeatedly has to be overcome anew in relation to the subjects addressed (cf. Reutlinger and Lingg 2012). At least three trends in urban development and attempts at interdisciplinary cooperation in the recent past confirm the need for such a multidimensional perspective:

The first and foremost trend is the simple fact that the 20th century was a century of urbanization: At its beginning, approximately 7 % of the world population lived in cities. By the beginning of the 21st century, this had risen to more than 50 %.

As a result, urban space has now become the context of the ‘self-educational processes’ for the majority of human beings (Kessl and Reutlinger 2010). The discourses in social theory that have long emphasized the relevance of urban space for human development also point to this fact. However, they have only attracted broader attention in recent years, as shown in the rediscovery of the theoretical work of Henri Lefebvre (Guelf 2010; Harvey 2012; Schmid 2005; Vogelpohl 2012).

Second, the relevance of Spielräume is also becoming visible on a concrete level: for example, the ways in which different urban contexts either allow or constrain different educational opportunities for those who live in them. At the beginning of the 21st century, the major cities in German-speaking regions are characterized by a marked spatial segregation, meaning a “disproportional distribution of population groups across suburban areas” (Friedrichs 1983, p. 217, translated). As a result, some authors have long been talking about segregated cities (Freyberg 1996; see also Farwick 2011). However, it is not just internally that major cities reveal socially stratified contexts; there is also a growing inequality between cities. The degree and form of the spatial segregation of urban contexts reveals enormous regional differences at the beginning of the 21st century, and this, in turn, exerts a major influence on the conditions underlying the opportunity for education.

Finally, there has been a rediscovery of the fundamental role of the location of educational and cultural relations as an important topic in pedagogic and educational theory (Böhme 2009; Dirks and Kessl 2012; Reutlinger 2008).

First attempts to mediate between educational and urban development perspectives can be found in the discussions on an integrated or “learning-friendly urban development” (Paul-Kohlhoff 2011, p. 143, translated). In response to massive urbanization tendencies, segregation, and the accompanying increase in competition (education as a relevant location factor), this focuses awareness not only on the importance of the institutional design of the local education system but also on the challenge of being able to design the “city” as a location of learning in a comprehensive sense; that is, as a context that encourages informal learning processes (cf. Leipzig Charta 2007). The linking of educational and urban development perspectives in these discussions should be made visible particularly by new job profiles such as “city manager” or “community management”. A look at the corresponding programs indicates that the specific disciplinary origins of the corresponding agents seem to be losing relevance and are being replaced by a focus on the self-definition as an intermediary not only between the different political and administrative departments but also between the level of controlling and the level of the local city district, which is also an entity working with participation-oriented procedures. However, it has yet to be clarified whether an inter- or even intradisciplinary self-definition can actually be constructed here, and how far it has really been possible to achieve multidimensionality along with a reflective attitude that takes into consideration the different interest groups and power structures.

Currently, there are some signs of different programmes and approaches such as ‘intermediarity’ ‘resident participation’ that have emerged within the context of the modernization of local governments. However, these are not yet sensitive enough to

respond to the different interest groups and power structures. In this sense, the necessary structural features (or characteristics) have been ignored and there has been a failure to provide the appropriate social infrastructure in different areas of the city, as well as access to adequate educational and cultural facilities.

Due to the structural limitations and handed-down cultures of thinking in the German-speaking world that form the context of the considerations presented here (Kessl and Reutlinger 2013a), one can only point to the necessary multidimensionality of education and urban development. Efforts to bring together educational and urban development perspectives in an appropriate way are just beginning.

'Spielraum'—The Programme

Our deliberations on the relation between education and urban development emerged following a concrete education and urban development programme entitled *SPIELRAUM*. This programme initiated by the *Deutsche Kinder- und Jugendstiftung* (German Children and Youth Foundation, DKJS) is founded on integrating the fundamental assumption that educational and urban development processes are structurally entangled. It is characterized by a focus on concrete metropolitan locations at which constructional measures to convert or redesign sites as recreational spaces for youth (e.g., soccer pitches, skateboard parks, or basketball courts) represented the starting point for local SPIELRAUM activities in Austria, Germany, or Switzerland. This physical-material development factor was simultaneously linked to conceiving these sites as spaces for education. To ensure that this would happen, funding proposals submitted to the DKJS had to be joint submissions by political-administrative and social work actors. The specific social work providers (e.g., providers of child and youth work or outreach work agreed by contract to be responsible for the educational structure and development of activities at and around the concrete site, whereas the local government actors were responsible for its physical layout.[1] In 2009, the *SPIELRAUM* programme was implemented by the DKJS in cooperation with the sporting-goods manufacturer *Nike* in five locations in Berlin, Frankfurt am Main, Hamburg, Vienna, and Zürich together with the corresponding local partners.

When describing its work, the DKJS characterizes the programme as follows: "*SPIELRAUM* promotes initiatives to work together with young people in transforming unused spaces into more hospitable locations—for team sports and for personal development. Hence, the programme uses the opportunities provided by sport that will enable socio-educational youth work to gain access to young people in a way that they will accept. Ideally, everybody joins in and helps: parents, neighbours, and anybody else who can assist young persons" (DKJS 2012, no page, translated). This names the first main programme level: the level of youth and the

[1]Results of a scientific evaluation of the *SPIELRAUM* development programme can be found in Kessl and Reutlinger (2013a).

goal of extending capabilities on this level that should be achieved particularly by getting them to participate in both designing the site and implementing educational processes at and around that site. On the second main level, the programme is designed to gain the sustained commitment of adult partners, above all, the socio-educational organizations involved and the professionals working in them. *SPIELRAUM* aims to use new forms of networking and cooperation. It tries "to overcome jurisdictional boundaries and form communities of responsibility. Different actors such as youth work providers, parents, the youth welfare office, schools, or sports clubs help to transform an unattractive space into a visible and known location and an important meeting point for young people in the neighbourhood. Where they can do what they like to do and get the support they need" (ibid).

Looking at the design of the programme, *SPIELRAUM* does not try to transform the two aspects of education and urban development into each other. Instead, it tries to use the conversion or redesigning of a site and its occupation by—potential and/or existing—users to enable and potentially already initiate education processes by integrating the users into the design process. Hence, the programme does not see itself as aiming to do something *for* children and adolescents, but to encourage a process of development and change through *their participation*. The programmes gain access to children and adolescents through their physical activity or, more precisely, through sport and play.

Like all DKJS programmes, the *SPIELRAUM* programme emphasizes that although it refers to "promoting the individual, this is not [remaining] on the individual level, but [aiming toward] the structural level of creating educational spaces" (Streblow 2007, p. 179, translated). This is why discussions with those responsible for the programme led to the emergence of the concept of educational spaces as a theoretical focus that was then developed into a heuristic model (cf. Kessl and Reutlinger 2013b). At this stage, we cannot say how far this can be developed further into an analytical perspective for the discussion on social space and educational landscapes in general.

The *SPIELRAUM* programme aims to strengthen the capabilities of children and adolescents by facilitating and encouraging educational processes. The scientific evaluation studied how far this can succeed within the intended participatory design of a site, the subsequent use of that site, and the accompanying sense of belonging among the children and adolescents.

Education and Urban Development as Developmental Factors for *Spielräume*: Some Suggestions

Before drawing some summary conclusions from the results of the evaluation, we want to point out that corresponding research findings in German-speaking countries reveal some support for the twofold perspective on education and urban development underlying the *SPIELRAUM* programme. For example, the results of

the scientific evaluation of the national German programme *Entwicklung und Chancen junger Menschen in sozialen Brennpunkten* (E&C, Development and opportunities of young people in socially disadvantaged areas) and the umbrella programme *Stadtteile mit besonderem Entwicklungsbedarf – Soziale Stadt* (Urban districts with particular developmental needs: The social city) indicate that an exclusive concentration on constructional improvement measures is just as insufficient as an exclusively pedagogic focus on individual "disadvantaged" population groups. The former leads to the risk of failing to address the interests and decision-making structures of the users and the way they run their daily lives. The latter, although certainly attracting attention in the form of a political and professional focus on specific residential areas, city districts, or places, simultaneously encourages stigmatization—rather than the desired improvement in the sense of increasing the possibilities of participation for the residents.

Against this background, we consider the following summary considerations from the scientific evaluation of the *SPIELRAUM* programme to be of central significance for further discussions on designing projects in the context of education and urban development:

Development Through Overlapping Interfaces

Initiatives such as the *SPIELRAUM* programme can open up local developmental potentials for implementing concrete service structures. In *SPIELRAUM*, this took the form of concrete projects designed not only to encourage different and innovative pedagogic service structures but also, in part, to make them possible. In the concrete implementation of the project in the various locations, efforts focused initially on converting or redesigning a single site in which children and adolescents could engage in some kinds of sport.

To handle this process, the site representatives had to invest a great number of working hours and also acquire competencies outside their field (e.g., on building regulations). This points to the high demands and the accompanying difficulties involved in linking together education and urban development as developmental factors. Of course, this should not deter an engagement in this direction, but is something that should already be taken into account explicitly in the programme design.

Site-Specific Inner Logics as a Particular Strength of SPIELRAUM

During the scientific evaluation, it became clear that each local site is characterized by its own inner logic. This could be seen, first, in the specific structure of service providers and staff; second, in the accompanying professional self-definition; and third, in the form of local framing conditions. The far-reaching opportunity to

develop these inner logics is one of the great strengths of the *SPIELRAUM* programme. To a large extent, this also goes hand in hand with the territorial approach to the specific site: By focusing on concrete sites, the directly local constellation acquired a major importance for the success of the individual project. Because the *SPIELRAUM* programme did not exert a marked influence on this constellation, the site-specific inner logic was able to evolve. Hence, *SPIELRAUM* left space for each specific local constellation. Nonetheless, this approach does harbour one problem: those providers who are able to profit from such programme proposals as *SPIELRAUM* are, under some circumstances, only, or primarily only, those that already possess a functioning cooperation structure and that—in addition to their daily work—can afford to invest the effort in applying for such funding as that offered by the *SPIELRAUM* programme. Hence, the experiences gained here suggest that it may well be worth considering whether future programmes could also arrange funding for providers to make applications.

Professionalism as a Regulatory Measure

Because the *SPIELRAUM* programme is conceived primarily in relation to education as the developmental factor, the decisive dimension for the programme is the pedagogic one. This called for a correspondingly professional programme design at each site. The challenge facing the *SPIELRAUM* programme was to enable and ensure professional pedagogic standards in line with the programme goals at each site while simultaneously respecting the inner logic of the local constellation. The evaluation findings show that this can succeed only through a strongly process-oriented programme controlling that supports the professional autonomy of the socio-educational site representatives in line with the conceptual focus on the goals of the programme while simultaneously granting them sufficient personal scope within the specific local context.

SPIELRAUM Has Delivered Only the Initial Framework for Establishing Local Education Spaces

The constructional conversion or redesigning process was dealt with successfully at all locations, although the amount of time required varied greatly. At the time of the completion of the scientific evaluation, developments were nonetheless not so advanced as to permit an appropriate judgment on the sustained establishment of local free spaces as educational spaces for children and adolescents. Hence, it will only become possible in the future to determine whether the pedagogic goal of *SPIELRAUM* has been achieved at all sites. Therefore, follow-up activities in the *SPIELRAUM* programme should focus on further work on designing and

sustainably establishing such local education spaces and broader educational contexts. It is precisely the developmental factor of education that needs to be a strong future focus. This work on the pedagogic dimension of the *SPIELRAUM* programme could be supported specifically by a future funding agency providing, for example, pedagogic further training sessions for the site representatives.

The Need to Formulate Transparent Programme Goals

The central philosophy of the *SPIELRAUM* programme along with any possible follow-up programmes should repeatedly be made transparent to the site representatives. In other words, the goal should be an explicit curriculum. This is the only way to achieve a cooperative programme implementation and thereby ensure professional social-pedagogic work on site. In this context, it is necessary to pay attention to which opportunities to exert an influence on the design of the programme itself are available not only to the site representatives but also to the young persons who come there. This makes it necessary to think about which actors should be able or not able to exert how much influence on the programme either implicitly or explicitly at which point in time. Corresponding opportunities for participation have to be ensured.

The Programme Coordination Requires an Exit Strategy that Is Compatible with Local Conditions

The various phases of a programme such as *SPIELRAUM* require different forms of engagement and cooperation between the site representatives and the programme controllers. Initially, there are intensive phases of engagement during the implementation phase of the programme at the site. These manifest in the participation of the programme controllers in specific opening events on site or in the preparation and careful implementation of network meetings. However, when it comes to the final phase of the programme, it is also necessary to reach an agreement on both when and in which way the programme controllers should withdraw from local on-site activities.

Finally, it is important to note that the *SPIELRAUM* programme can be nothing more than a pilot project within the framework of a more comprehensive "intervention" that will systematically and productively merge together education policy and urban development perspectives in order to ensure the necessary future provision of *Spielräume* for children and adolescents. Hence, initiatives such as the *SPIELRAUM* funding programme can in no way serve as a substitute for the public provision and sustained equipment of urban free spaces but only contribute to their further development. Nonetheless, the experiences gained within the context of the SPIELRAUM programme highlight some fundamental aspects that will need to be

taken into account in future initiatives aiming to link together education and urban development.

Bibliography

Böhme, J. (2009). *Schularchitektur im interdisziplinären Diskurs: Territorialisierungskrise und Gestaltungsperspektiven des schulischen Bildungsraums*. Wiesbaden: VS.

Dirks, S., & Kessl, F. (2012). Räumlichkeit in Erziehungs- und Bildungsverhältnissen. In U. Bauer, U. H. Bittlingmayer, & A. Scherr (Eds.), *Handbuch Bildungs- und Erziehungssoziologie* (pp. 507–526). Wiesbaden: VS.

DKJS—Deutsche Kinder- und Jugendstiftung gemeinnützige GmbH. (2012). *SPIELRAUM*. www.spielraum-online.net/index.php?id=. Accessed 3 January 2012.

Farwick, A. (2011). *Gespaltene Gesellschaft – gespaltene Stadt? Zur Problematik der sozialen Segregation in NRW*. http://www.ils-forschung.de/down/gespaltene_solidarische_Stadt.pdf. Accessed 15 November 2011.

Friedrichs, J. (1983). *Stadtanalyse: Soziale und räumliche Organisation der Gesellschaft*. Opladen: Westdeutscher Verlag.

Guelf, F. M. (2010). *Die urbane Revolution: Henri Lefèbvres Philosophie der globalen Verstädterung*. Bielefeld: Transcript.

Harvey, D. (2012). *Rebel cities: From the right to the city to the urban revolution*. New York, NY: Verso.

Kessl, F., & Reutlinger, C. (2010). Ökonomischer Raum: Megacities und Globalisierung. In S. Günzel (Ed.), *Raum: Ein interdisziplinäres Handbuch* (pp. 145–161). Stuttgart, Weimar: J. B. Metzler.

Kessl, F., & Reutlinger, C. (Eds.). (2013a). *Urbane Spielräume: Bildung und Stadtentwicklung*. Wiesbaden: VS.

Kessl, F., & Reutlinger, C. (2013b). Bildungsräume – ein Konzept zur Analyse urbaner Spielräume. In F. Kessl & C. Reutlinger (Eds.), *Urbane Spielräume: Bildung und Stadtentwicklung* (pp. 25–36). Wiesbaden: VS.

Leipzig Charta (2007). *Leipzig Charta zur nachhaltigen europäischen Stadt: Angenommen anlässlich des Informellen Ministertreffens zur Stadtentwicklung und zum territorialen Zusammenhalt in Leipzig am 24./25. Mai 2007*. http://www.nationale-stadtentwickungspolitik.de/cln_032/nn_251602/Content/Publikationen/NSP/leipzig__charta__zur__nachhaltigen__europaeischen__stadt,templateId=raw,property=publicationFile.pdf/leipzig_charta_zur_nachhaltigen_europaeischen_stadt.pdf. Accessed 24 Feb 2012.

Paul-Kohlhoff, A. (2011). Hoyerswerda – eine besondere Stadt? In M. Bergmann & B. Lange (Eds.), *Eigensinnige Geographien: Städtische Raumaneignungen als Ausdruck gesellschaftlicher Teilhabe* (pp. 127–146). Wiesbaden: VS.

Reutlinger, C. (2008). Erziehungswissenschaft. In S. Günzel (Ed.), *Raumwissenschaften* (pp. 93–108). Frankfurt a. M.: Suhrkamp.

Reutlinger, C., & Lingg, E. (2012). Innovativer Campus? Nicht nur eine Frage der Gestaltung gebauter Umwelt: Editorial: Zusammenarbeit in der Hochschule – Lernräume. *Bauten und Campusplanung. Zeitschrift für Hochschulentwicklung, 7*(1), 71–76.

Schmid, C. (2005). *Stadt, Raum und Gesellschaft: Henri Lefebvre und die Theorie der Produktion des Raumes*. Stuttgart: Steiner.

Streblow, C. (2007). Dialogorientierte Evaluation: Beispiele und Thesen aus der Arbeit der Deutschen Kinder- und Jugendstiftung. In U. B. Schröder & C. Streblow (Eds.), *Evaluation konkret: Fremd- und Selbstevaluationsansätze anhand von Beispielen aus Jugendarbeit und Schule* (pp. 165–182). Opladen: Barbara Budrich.

Vogelpohl, A. (2012). *Urbanes Alltagsleben: Zum Paradox von Differenzierung und Homogenisierung in Stadtquartieren*. Wiesbaden: VS.

von Freyberg, T. (1996). *Der gespaltene Fortschritt: Zur städtischen Modernisierung am Beispiel Frankfurt am Main.* Frankfurt a. M., New York: Campus.

Urban Poverty Areas and Education

Alexandra Nonnenmacher

Abstract This chapter offers an overview of the current results of quantitative empirical studies on how the district in which children and young people live affects their education. After an introduction proposing the theoretical modelling of contextual effects of this type, two central areas are covered: institutions and social capital. Until now, findings in both fields have been inconsistent, indicating that firstly there is no direct causal effect from schools' equipment or social structure, the social capital available in the neighbourhood, or children's and young people's educational success; instead what needs to be studied is indirect effects imparted via processes within the school, or by social networks: social mechanisms. The second point which becomes clear is that the existing findings bear little relation to one another and that there is as yet no systematic theoretical framework to explain the influence which poor urban neighbourhoods have on education.

Keywords Contextual effects · Education · Institutions · Social capital · Norms · Social control · Social structure · Social mechanisms

Poor neighbourhoods have likely existed as long as there have been cities large enough to allow a spatial segregation of different social classes. The question of whether living or growing up in a poor area influences individual preferences and modes of conduct is also not new: since the inception of the Chicago School in the 1920s, a comprehensive set of theoretical and empirical works have been based on the basic principle that social problems can be explained by the conditions of urban contexts (e.g. Shaw and McKay 1969, first edition 1942).

A. Nonnenmacher (✉)
Faculty of Education, Architecture and Arts, Department of Educational Science and Psychology, University of Siegen, Adolf-Reichwein-Str. 2a, 57068 Siegen, Germany
e-mail: alexandra.nonnenmacher@uni-siegen.de

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Since that time, an increasing interest in the significance of the socio-spatial environment, as well as its influence on education, has been recorded in the field of social science research. Between 1985 and 2014 the number of articles submitted to the Social Science Citation Index with the keywords “education” and “neighbourhood” increased by a factor of 26, yet only by a factor of 4 for “education” alone.

The findings of this enhanced research in the field of contextual effects on education form the first central theme of this paper. The overview of the state of research is limited to quantitative-empirical studies whose methodological approach is suitable to effectively substantiate contextual effects, e.g. with the help of multi-level analyses. The second central point concerns the unanswered questions which still exist.

Components Relevant to Education in Urban Areas

Referring to Johnson (2012), urban areas can be fundamentally considered as systems which consist of the socio-structural composition, institutions, the functional environment and the social processes within and between these three components. The fact that there is currently no systematic theoretical model for the mutual influences of these components on each other restricts the empirical analysis of neighbourhood contextual effects on the education of children and adolescents. The findings submitted thus far are few and far between and do not correlate well with each other.

Figure 1 presents an attempt, with no claims of completeness, to illustrate potential (and in part empirically proven) connections between components relevant

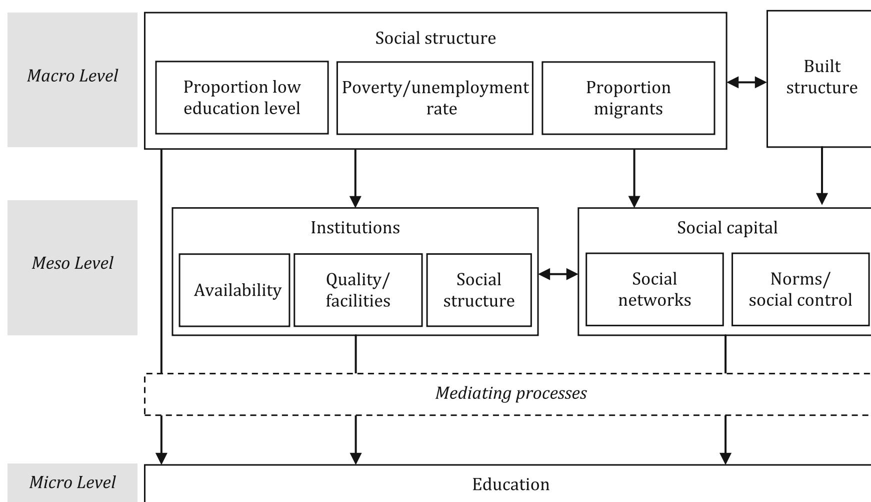

Fig. 1 Influence of neighbourhoods on education

to education in urban areas. On the macro level, the neighbourhood, there is a connection between functional and social structure. For example, poor areas are comparatively densely built-up areas with low-quality buildings, have fewer green areas and are more heavily affected by noise and other forms of pollution.

A number of studies are available on the influence of neighbourhood social structure on the educational achievement of children and adolescents. Crane (1991) or Crowder and South (2003) show, for example, that with increasing deprivation of an area, the potential that an adolescent will drop out of school also increases. However, it is unclear how this effect arises. It is helpful here to differentiate between direct and indirect effects of urban areas. Indirect effects are negotiated via the meso level, more precisely: through the institutions available in urban areas and through social contacts. Regarding direct effects, it would have to be accepted that growing up in a deprived area has an influence on the education of children and adolescents by itself. The chapter on 'Social capital in the Neighbourhood' deals with the problem of explaining such effects.

Institutions

The institutions which Leventhal and Brooks-Gunn (2003, p. 211) allege to have an influence on the educational development of children and adolescents include didactic venues such as libraries, education-enhancing recreation facilities (music courses, advisory institutions) as well as kindergartens and schools. In addition, associations and other organisations which contain educational processes can be included.

Empirical findings on the availability, quality, facilities and social structure of institutions are available mainly for schools. "Education" is understood as formal scholastic education and is evaluated with regard to school grades, test scores and transition recommendations at the end of primary school (at the age of about 10, i.e. after Year 4 in most German *Bundesländer*).

On the subject of school facilities and quality, US studies have only shown in some cases that schools in poor areas are worse-equipped in terms of functional features as well as the qualifications, experience and motivation of their faculties compared to schools in other areas (e.g. Whipple et al. 2010). In any case, it is questionable whether such factors are conclusive on their own. According to Whipple et al. (2010), schools should not be considered in isolation but rather have an effect on the educational development of children and adolescents only in interaction with risk factors in the neighbourhood (e.g. the level of education).

The social structure of schools fundamentally reflects the distribution of the social and ethnic features of the neighbourhood (cf. Frankenberg 2013). But since parents with a high level of education are more inclined than other parents to select schools located in better neighbourhoods for their children, and since migrants and ethnic minorities, respectively, tend to prefer schools with a high proportion of migrants or at least to not avoid them (cf. Tarawasa 2012), social and ethic

segregation in schools is rather more prominent than it is in the neighbourhood. However, it is not conclusive whether or not social composition of schools and school classes has an influence on academic performance. Empirical evidence on the influence of a large proportion of migrants is inconsistent: Kristen (2002) shows that the likelihood of children moving on to "Realschule" (secondary school) or "Gymnasium" (grammar school) (instead of to "Hauptschule" [lower secondary school]) at the first education transition reduces with an increasing proportion of migrants in primary school classes, and that this is independent of the academic performance and individual migration background of the child. In contrast, Schulze et al. (2009) are not able to determine any such effect, along with van Ophuysen and Wendt (2009) for the development of performance in mathematics. Furthermore, findings on the influence of social status and the average level of education of the students' parents, respectively, are only of limited significance. The influence of the parental level of education on their *respective* children is apparent throughout (e.g. Schulze et al. 2009); an additional effect of the average parental level of education on *all* students, independent of their respective educational origin, appears in the PISA study (OECD 2005) as well as in Baumert et al. (2006), yet not in Scharenberg (2014).

These inconsistent findings consequently mean that social structure has no direction causal influence on individual school performance and that it is necessary to investigate indirect effects mediated via internal school processes. Baumert et al. (2006, p. 126) present four corresponding areas in their comprehensive model: parents' normative culture (e.g. performance and behavioural expectations), school groups' normative culture (e.g. performance norms), processes of comparison at the student level (e.g. within the school class), and the curriculum and the teaching (e.g. teachers' expectations). A comprehensive examination of the model is still to be carried out; individual findings are, however, available. In reference to *normative culture among students*, Scharenberg (2014) shows that the average acceptance of performance norms in the classroom accompanies better individual reading comprehension. According to the studies summarized by Hattie (2002, p. 457ff.) *didactics and teaching* positively correlate with the teaching faculty's estimation of students' capabilities and hence lead to strengthened encouragement for well-performing students. The influence of the parents' performance expectations on the academic performance of their child can be regarded as a well-backed finding (e.g. Schneider 2011). Whether the average level of parental performance expectations in the class has an impact on the performance of all students—including those whose parents do not have high expectations—is so far unclear.

Social Capital in the Neighbourhood

In order to describe the connection between the social structure of a neighbourhood and its social capital, it is helpful to differentiate between the social capital of the entire neighbourhood, understood here according to Putnam (1993, 1995) as the

entirety of social relationships between its residents, shared norms (and their enforcement through social control), and mutual trust, and social capital as an individually utilisable resource achievable through social relationships as described by Bourdieu (1983).

The density of the neighbourhood's social network, i.e. the quantity of children, adolescents and adults who are members of the same associations and organisations, who spend time together in their free time etc., is positively correlated with academic performance (cf. Sun 1999). It is unclear, however, whether this finding represents a causal effect and how it can be explained.

Empirical findings concerning the second component of the social capital in urban areas—norms and social control—show relatively unequivocally that the residents of poor areas tend to have normative preferences divergent from the majority society. These findings, however, have no bearing on education (e.g. norms regarding willingness to work hard, attitude towards work, etc.); instead, they relate particularly to the explanation of criminality and deviance (e.g. the concept of collective efficacy; see the systematic overview by Sampson et al. 2002). A similar picture is displayed by the results of those studies which pinpoint the enforcement (or lack of enforcement) of norms via social control as an explanation for criminality and deviance (e.g. among adolescents). Due to a lack of social control, teenagers in poor areas have the potential to become sexually active early (Browning et al. 2004) or to "hang out" unsupervised (Sampson and Groves 1989). For Germany, though, collective efficacy and social control have so far not proven to be mediating factors (cf. Friedrichs and Oberwittler 2007; Kunandt 2013).

The norms prevalent in the neighbourhood and the extent to which social control enforce them comprise the conditions for *collective socialization*. It is assumed that children and adolescents in the neighbourhood are either conveyed deviating norms or that an insufficient amount of social control prevents their internalisation of conventional norms. It is questionable, though, whether the whole neighbourhood and all its residents are relevant for this process. For this form of social learning, it would be sufficient for children and adolescents to infer from observable features of the neighbourhood's low social status or from the behaviour of strangers on the street that deviancy is acceptable. According to Cialdini et al. (1990, 1991), however, such "descriptive norms" have only a small influence on behaviour. It is more likely that people linked by social relationships are crucial, i.e. the social capital available in the social network (cf. Wilson 1996, p. 71).

Which potential friends and acquaintances are available for children, adolescents and their parents in the neighbourhood is dependent on its social structure: The higher the proportion of neighbours with a low level of education, low academic performance expectations etc., the larger the potential to meet people with such features (the *meeting*, as it is described in network research terminology). Nevertheless, fundamentally, the potential exists to associate socially only with children whose parents have a high level of education or other "positive" features. However, Nonnenmacher (2009) shows that while this kind of selection does exist, it is not extensive. Accordingly, the neighbourhood's opportunity structure leads to social networks which have fewer resources available to them than networks in

other neighbourhoods (cf. Small 2008), and this can be assumed also to apply to the social networks of children and adolescents in poverty areas: they meet and befriend others whose parents, like their own, have a low level of education and therefore have no access to resources such as information about higher education, educational aspirations, norms relevant to education etc. Such social relationships amongst children and adolescents form the basis for the second mechanism (besides collective socialization) through which conventional or deviating norms spread in the neighbourhood: *social contagion* between the members of a peer group (e.g. of adolescents). If the peer group represents deviating norms, they can act as a source or reinforcement of deviating normative preferences, as shown, for example, by studies on truancy (cf. Wagner et al. 2003).

Unanswered Questions

Despite the existing empirical findings, there is still a lack of systematic proof for the effects of growing up in an impoverished neighbourhood on the educational processes of children and adolescents. It would seem worthwhile to check to what extent the theoretical approaches and findings of other disciplines can be applied to this question. This is particularly applicable for the described findings on the effects of norms and social control. It should, however, be borne in mind that one cannot assume there to be a deterministic explanation model with contextual influences which are clearly separable from each other. Firstly, the action space of children and adolescents increases as they grow older; it remains to be determined how relevant the neighbourhood is to education opportunities, motivations and processes (see Oberwittler's (2004) findings on the correlation between the spatial limitation of friendship circles and the magnitude of neighbourhood effects on adolescent delinquency). Secondly, even if only the neighbourhood is considered, the contextual units overlap: the students in a classroom belong to various peer groups, the parents of a student are friends with parents whose children belong to another school class with different performance norms, etc. These overlaps present theoretical and empirical work with the challenge of specifying mutual dependencies and separating the effects of the various contextual units from each other.

Thirdly, it has been shown that—depending on individual features—some children and adolescents are more susceptible to neighbourhood effects while other are "immune" to them. In the context of the "Moving to Opportunity" experiment (MTO), it was determined, for example, that, only for girls, moving from an impoverished area to a less deprived area can improve academic performance (Kling et al. 2007).

It is possible that the "Situational Action Theory", which explains delinquency among adolescents (cf. Wikström et al. 2012), offers a guiding principle. If its findings are transferable to the education of children and adolescents in poor areas, three preconditions are necessary: didactic opportunities, corresponding behavioural dispositions and collective norms and social control, respectively. Whether

it is more promising to exclusively aspire to the creation of these conditions in schools or in the whole neighbourhood is unclear, not least because of the confounding of these two contexts, as described above. If it is exclusively a matter of scholastic education, the results of various studies indicate that the school context is more important (e.g. Brännström 2008). If education is understood in a broader sense, it appears necessary to consider parents and other neighbourhood actors in addition to schools.

Bibliography

Baumert, J., Stanat, P., & Watermann, R. (2006). Schulstruktur und die Entstehung differenzieller Lern- und Entwicklungsmilieus. In J. Baumert, P. Stanat, & R. Watermann (Eds.), *Herkunftsbedingte Disparitäten im Bildungswesen: Differenzielle Bildungsprozesse und Probleme der Verteilungsgerechtigkeit. Vertiefende Analysen im Rahmen von PISA 2000* (pp. 95–188). Wiesbaden: VS.

Bourdieu, P. (1983). Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In R. Kreckel (Ed.), *Soziale Ungleichheiten* (pp. 183–198). Göttingen: Otto Schwartz & Co. (Special Issue 2 of *Soziale Welt*).

Brännström, L. (2008). Making their mark: The effects of neighbourhood and upper secondary school on educational achievement. *European Sociological Review, 24*(4), 463–478.

Browning, C. R., Leventhal, T., & Brooks-Gunn, J. (2004). Neighborhood context and racial differences in early adolescent sexual activity. *Demography, 41*(4), 697–720.

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*(6), 1015–1026.

Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct. *Advances in Experimental Social Psychology, 24*, 201–234.

Crane, J. (1991). The epidemic theory of ghettos and neighborhood effects on dropping out and teenage childbearing. *American Journal of Sociology, 96*(5), 1226–1259.

Crowder, K. D., & South, S. J. (2003). Neighborhood distress and school dropout: the variable significance of community context. *Social Science Research, 32*(4), 659–698.

Frankenberg, E. (2013). The role of residential segregation in contemporary school segregation. *Education and Urban Society, 45*(5), 548–570.

Friedrichs, J., & Oberwittler, D. (2007). Soziales Kapital in Wohngebieten. In A. Franzen & M. Freitag (Eds.), *Sozialkapital. Grundlagen und Anwendungen* (pp. 450–486). Wiesbaden: VS (Special Issue 47 of Kölner Zeitschrift für Soziologie und Sozialpsychologie).

Hattie, J. A. C. (2002). Classroom composition and peer effects. *International Journal of Educational Research, 37*(5), 449–481.

Johnson, O, Jr. (2012). A systematic review of neighborhood and institutional relationships related to education. *Education and Urban Society, 44*(4), 477–511.

Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica, 75*(1), 83–119.

Kristen, C. (2002). Hauptschule, Realschule oder Gymnasium? Ethnische Unterschiede am ersten Bildungsübergang. *Kölner Zeitschrift für Soziologie und Sozialpsychologie, 54*(3), 534–552.

Kunandt, S. (2013). Sozialräumliche Determinanten der Jugendkriminalität: Test eines Modells zur Erklärung des Gewalthandelns Jugendlicher aus verschiedenen Duisburger Ortsteilen. In D. Oberwittler, S. Rabold, & D. Baier (Eds.), *Städtische Armutsquartiere - kriminelle Lebenswelten? Studien zu sozialräumlichen Kontexteffekten auf Jugendkriminalität und Kriminalitätswahrnehmungen* (pp. 141–168). Wiesbaden: VS.

Leventhal, T., & Brooks-Gunn, J. (2003). Moving on up: Neighborhood effects on children and families. In M. H. Bornstein & R. H. Bradley (Eds.), *Socioeconomic status, parenting, and child development* (pp. 209–230). New Jersey: Lawrence Erlbaum Associates.

Nonnenmacher, A. (2009). *Ist Arbeit eine Pflicht? Normative Einstellungen zur Erwerbsarbeit, Arbeitslosigkeit und der Einfluss des Wohngebiets*. Wiesbaden: VS.

Oberwittler, D. (2004). Stadtstruktur, Freundeskreis und Delinquenz. Eine Mehrebenenanalyse zu sozialökologischen Kontexteffekten auf schwere Jugenddelinquenz. In D. Oberwittler & S. Karstedt (Eds.), *Soziologie der Kriminalität* (pp. 135–170). Wiesbaden: VS.

OECD—Organisation for Economic Co-operation and Development. (2005). *School factors related to quality and equity. Results from PISA 2000*. OECDiLibrary, http://www.oecd-ilibrary.org/education/school-factors-related-to-quality-and-equity_9789264008199-en. Accessed 4 April 2014.

Putnam, R. D. (1993). The prosperous community. Social capital and public life. *The American Prospect, 4*, 35–42.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy, 6* (1), 65–78.

Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: testing social-disorganization theory. *American Journal of Sociology, 94*(4), 774–802.

Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "neighborhood effects": Social processes and new directions in research. *Annual Review of Sociology, 28*, 443–478.

Scharenberg, K. (2014). Schule und Schulklasse als soziale Kontexte der Entwicklung im Jugendalter. In J. Friedrichs & A. Nonnenmacher (Eds.), *Soziale Kontexte und soziale Mechanismen* (pp. 317–348). Wiesbaden: VS.

Schneider, T. (2011). Die Bedeutung der sozialen Herkunft und des Migrationshintergrundes für Lehrerurteile am Beispiel der Grundschulempfehlung. *Zeitschrift für Erziehungswissenschaft, 14*(3), 371–396.

Schulze, A., Wolter, F., & Unger, R. (2009). Bildungschancen von Grundschülern: Die Bedeutung des Klassen- und Schulkontextes am Übergang auf die Sekundarstufe I. *Kölner Zeitschrift für Soziologie und Sozialpsychologie, 61*(3), 411–435.

Shaw, C. R., & McKay, H. D. (1969). *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press (first edition 1942).

Small, M. L. (2008). Racial differences in networks: Do neighborhood conditions matter? *Social Science Quarterly, 88*(2), 320–343.

Sun, Y. (1999). The contextual effects of community social capital on academic performance. *Social Science Research, 28*(4), 403–426.

Tarawasa, B. A. (2012). Live and learn? Contradictions in residential patterns and school dempgraphics. *Education and Urban Society, 44*(6), 655–671.

Van Ophuysen, S., & Wendt, H. (2009). Zur Veränderung der Mathematikleistung von Klasse 4 bis 6. Welchen Einfluss haben Kompositions- und Unterrichtsmerkmale? In J. Baumert, K. Maaz, & U. Trautwein (Eds.), *Bildungsentscheidungen* (pp. 302–327). Wiesbaden: VS (Special Issue 12 of Zeitschrift für Erziehungswissenschaft).

Wagner, M., Dunkake, I., & Weiß, B. (2003). *Verbreitung und Determinanten der Schulverweigerung in Köln. Dritter Zwischenbericht für die GEW Stiftung Köln*. Köln: Forschungsinstitut für Soziologie, Universität zu Köln. http://www.uni-koeln.de/wiso-fak/fisoz/Forschung/schulver/material/zwischenbericht3.pdf. Accessed 4 April 2014.

Whipple, S. S., Evans, G. W., Barry, R. L., & Maxwell, L. E. (2010). An ecological perspective on cumulative school and neighborhood risk factors related to achievement. *Journal of Applied Developmental Psychology, 31*(6), 422–427.

Wikström, P.-O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). *Breaking rules: The social and situational dynamics of young people's urban crime*. Oxford: Oxford University Press.

Wilson, W. J. (1996). *When work disappears. The world of the new urban poor*. New York: Vintage Books.

Schools as Components of the Inner Development of New Neighbourhoods

Christina Simon-Philipp and Gerd Kuhn

Abstract In recent years social change has led to fundamental changes in the cities. Life in the neighborhoods is becoming increasingly diverse and individual; at the same time the gap between rich and poor is widening. With these changes, the need for socially inclusive urban development is increasing. How can the pluralized world be held together and what kind of meeting places are necessary in neighborhoods of inner-city development? The various educational institutions are growing in importance as central modules for sustainable neighborhood development. They are inclusive places for encounters where tolerance can be practiced on a daily basis and neighborly life can grow. Various innovative examples that have been realized in recent years show great potential for city neighborhoods. Pioneering educational landscapes arise especially when the various areas of urban development co-operate and the educational institutions form a network with the neighborhoods.

Keywords Education · Educational landscape · Neighborhood development · Urban neighbourhoods · Urban development · Interior development · Integration

In recent years the social gap in our society has been widening. To develop more equal opportunities and future prospects for all residents, greater importance has been placed on city neighbourhood concepts with integrated educational set-ups. Urban planners and urban researchers of Stuttgart University of Applied Science, in cooperation with the City of Stuttgart and as part of the National Urban Development Policy, have worked out a new neighbourhood concept for a former

C. Simon-Philipp (✉)
Stuttgart University of Applied Science, Schellingstr. 24, 70174 Stuttgart, Germany
e-mail: christina.simon@hft.stuttgart.de

G. Kuhn
Faculty of Architecture and City Planning, University of Stuttgart, Kepplerstr. 11, 70174 Stuttgart, Germany
e-mail: gerd.kuhn@iwe.uni-stuttgart.de

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freight depot (Institute for Applied Research, Stuttgart University of Applied Science, 2007–2009, city planning: Pesch and Partner, Stuttgart/Herdecke). Gerd Kuhn and Christina Simon-Philipp carry out research work in the areas of housing and development, public space and the social mix.

Learning—A New Component of the Inner Development of New Neighbourhoods

With the wave of conversion beginning in the early 1990s and in the wake of the on-going economic structural change, housing on brownfield sites in the city has become a central theme of urban renewal and urban redevelopment. There are two aims: on the one hand the realization of larger contiguous neighbourhoods on wasteland with additional new infrastructure and public facilities and on the other hand the insertion of neighbourhood additions of different sizes, taking advantage of what is already available. In recent years there has been talk of a renaissance of city living (cf. Harlander et al. 2007); densely populated areas have found a wider acceptance. The development of new residential areas on brownfield sites in addition to the appreciation of existing neighbourhoods is one of the most important areas of a qualified internal development. In the last 25 years many urban wastelands have sprung up, especially as a result of de-industrialization. “Non-places” have been recovered for housing in the city in the sense of re-urbanization, and in consequence of that the image of living in the city has changed for the better. In many cases, integrated development strategies have been implemented, which place particular importance on social infrastructure, education and care facilities.

Education and Places of Learning Profit from a Changing Society

The key data on population development are well-known: people are living longer, the proportion of children in our society is decreasing and they will be growing up in an international, multicultural society. Family structures are changing, the proportion of children with a migrant background will continue to rise and with it the challenge of education and integration. Apart from the new composition of the population, a fundamental change in household structures is striking. Traditional two-generation households—a married couple and one or two children—are no longer a typical mode of habitation (cf. Federal Office of Statistics 2013; GfK 2013). These fundamental social changes are often described as individualization—freedom from traditional constraints—but they also give cause for concern. The question of what keeps society together is becoming more urgent. Where do the

different socio-demographic groups come together, and how can peaceful coexistence be achieved? It is obvious that the focus of urban development policy is changing and is being directed at the inner-city multicultural neighbourhoods. This focus is no longer on the deficits, but on the potentials of these city areas that point to their future as places of integration and coexistence. The city, which was described as an "integration machine" (cf. Häußermann 1995, p. 96; Heitmeyer 1998, p. 443), requires new spaces and practices of urban collaboration (cf. Rauterberg 2013). We should strengthen those social cohesion forces that promote cohesion in the neighbourhoods (cf. Harlander et al. 2012). Educational institutions are increasingly entering the focus of urban development and education policy debates (Stuttgart University of Applied Science 2009, p. 8, 29, 61), with schools acquiring "the role of social stabilizers in difficult, often deprived neighbourhoods. There they act as the centre of the local community by linking education with social and cultural district work" (Reicher 2012, p. 143, own translation).

The aspect of enabling all members of the local communities to find their place in the educational institutions of the district must be the focus for sustainable neighbourhood development. Since poor levels of education are particularly to be found in immigrant families, and since in the big cities the students with migrant background are now a significant portion of the total number of students, the priority must lie in eliminating inequalities and bringing about educational opportunities for all residents. "So far, children from higher social classes and academic families usually attend a grammar school, while children from socially disadvantaged families go to a nine-year elementary school or a school for special-needs students or to a comprehensive school. (…) With an inclusive pedagogy that does not know 'special treatment' for certain groups, we could counteract social disintegration and hence the dissolution of society as a whole." (Butterwegge 2012, p. 314, own translation). We have to strongly promote the expansion of educational institutions outside families. Facilities for early-childhood education, *Ganztagschulen*[1] and comprehensive schools can be significant places of social, inclusive urban development.

For families—i.e. communities in which at least one child lives—local educational opportunities have become a decisive criterion when choosing a residential location. Schools' level of performance is met with heightened public interest (Häußermann et al. 2008, p. 197). The network of high-quality education facilities with a differentiated housing supply is a not-to-be-underestimated challenge of sustainable urban and neighbourhood development. This raises the question of how places of education can become engines of integrated sustainable urban and neighbourhood development and how they can alter the housing environment (cf. University of Applied Science Stuttgart 2009). In existing structures, it has been found, it is difficult to activate schoolyards after school, though this is very necessary in densely populated sections of the city (cf. Arbeitsgemeinschaft Baden-Württembergischer Bausparkassen 2002, p. 53). The networking of public

[1]Schools which provide activities after the traditional lunchtime end to the German school day.

spaces requires a re-encoding and "hybridization" of private and public spheres (cf. Kuhn et al. 2012; Menzl 2010, p. 164). Only then will places of education become an integral part of urban development. What opportunities and prospects are opening up for urban development? What limits and barriers exist? There is still a need for research on these issues.

School and Education in the District—Innovative Examples

School planning with innovative pedagogical and architectural concepts that radiate to some extent into the environment is frequently found. New, ambitious approaches often start from private or church organizations. In Scandinavia and the Netherlands, in particular, we find interesting projects. The places of learning are designed as educational centres, such as the Futurum School in Häbö (Sweden) or as multifunctional community school organized with community centres, sports centres and apartments, as in the concept of the Brede School in the Netherlands (for instance the Haarlem Community School) (cf. Harnack and Schluchter 2009, p. 39). In Germany, too, there are innovative experimental schools such as the Laboratory School in Bielefeld or the Helene Lange School in Wiesbaden. The projects realized in Germany and other European countries show that new places of education with a particular concept and a good urban integration can lead to an urban upgrading and to the social stabilization of neighbourhoods. They have the potential to call forth life and living qualities in the neighbourhoods and to promote social interaction (cf. Stuttgart University for Applied Science 2009, p. 61–66).

Even before the beginning of the funding program "Social City" (financed both by the Federal Government and the sixteen states' governments) educational projects were used as initial projects for neighbourhood development. Within the framework of previous programs such as "Districts with Special Development Needs" in the federal state of North-Rhine-Westphalia, education and schooling have a prominent rank. The goal was, above all, to further social stability in poor neighbourhoods such as satellite towns with a high percentage of immigrants. One example is the Protestant Comprehensive School in Gelsenkirchen-Bismarck, which was placed in a district with structural and social problems. As a key project of the Emscher Park International Building Exhibition (IBA, Bertelsmann Stiftung 2014) the building of this comprehensive school was intended as a "beacon of hope for new social approaches" in the Northern Ruhr area. The competition documents for the new building said the goal was a comprehensive school which had to provide a stimulus for the existing and the new residential area in educational, social and urban planning perspectives. The participatory approach to the construction of the school, the concept of an open building, the school as a public meeting place and the integration of foreign and Muslim children have greatly contributed to its success. The premises, parts of which were built by the users themselves, serve as a cultural centre within the district (Figs. 1 and 2).

Fig. 1 Gelsenkirchen-Bismarck protestant comprehensive school—Pupils building their school (*Source* Peter Hübner)

Fig. 2 Gelsenkirchen-Bismarck protestant comprehensive school—Classroom with new atmosphere (*Source* Peter Hübner)

Fig. 3 "Gate to the World" educational centre in Hamburg-Wilhelmsburg (*Source* Gerd Kuhn)

Since then, education and schooling has been a subject of the IBA, for instance the IBA "Re-development in Saxony Anhalt, 2012", or the IBA Hamburg, 2013. The IBA Hamburg chose the theme of education and schooling as the key topic of the territorial development of the Elbe Islands. The goal was achieved by presenting a forward-looking educational landscape with attractive educational opportunities (Figs. 3 and 4). The chances of children and young people living in the district were to be improved, and Wilhelmsburg, a residential area, was to become attractive for young families. More than 100 institutions joined "IBA shipyards", i.e. community centres with schools, sports and social and cultural activities. All-day community centres are used to extend language support, raise the level of qualification, and better link the wide range of educational opportunities. Short-term initiatives such as the University of Neighbourhoods enrich the broad selection of educational offerings.

Fig. 4 "Gate to the World" educational centre in Hamburg-Wilhelmsburg—multifarious offers form the new centre of the neighbourhood (*Source* Gerd Kuhn)

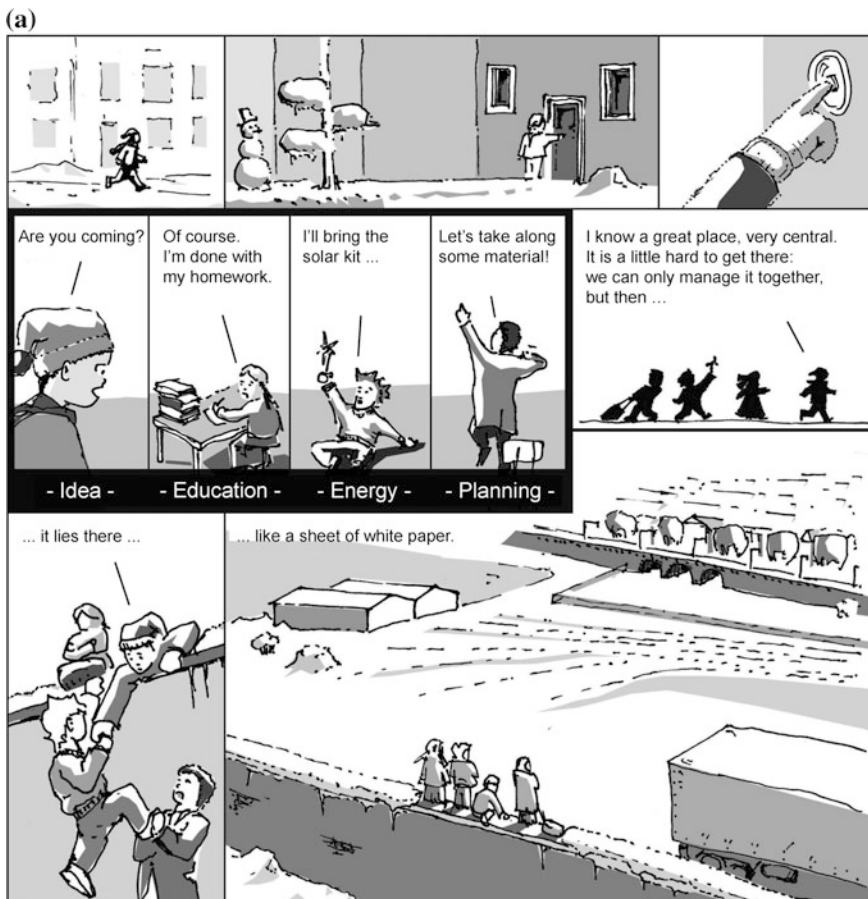

Fig. 5 Education as a location factor for new neighbourhoods (*Source* Hochschule für Technik Stuttgart, Nils Jansen)

The City of Cologne—accompanied by the "Montag Foundation Urban Spaces" and in cooperation with the "Montag Foundation Youth and Society"—realized an innovative educational project in an urban, densely populated residential area with multicultural residents. Seven educational institutions are forming a network for a new educational landscape in the centre. The various educational locations are planned to be connected by a network of re-shaped public spaces (see also Niemann in this volume).

The City of Stuttgart—supported by funds from the "National Urban Development Policy Program" and together with Stuttgart University of Applied Science—set forth a development strategy for the former freight depot area in Stuttgart-Bad Cannstatt with the aim of using educational and care institutions as engines for district development (cf. Stuttgart University of Applied Science 2009).

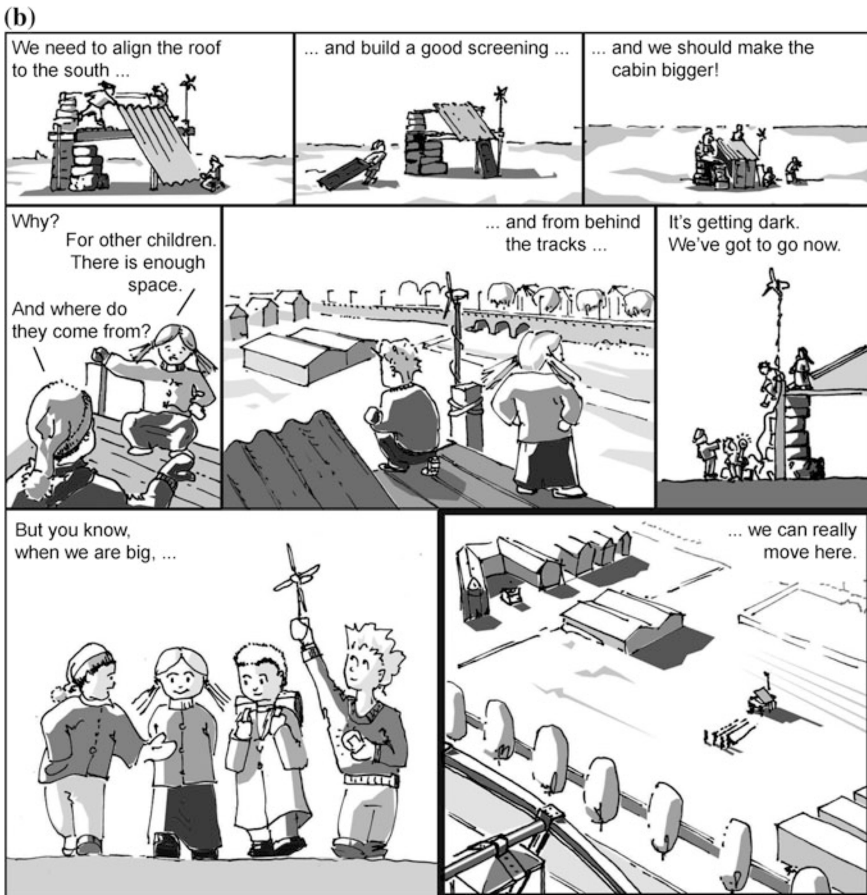

Fig. 5 (continued)

Based on a field development for problematic areas they tried new, cooperative planning strategies, and the area was equipped with special, compelling location factors. Unlike the conventional practice of urban planning, the spectrum of future institutions for care and education was part of the planning process before the urban design started. The fallow site is located in Bad Cannstatt, which, with its 70,000 inhabitants, is Stuttgart's largest and oldest district. Difficult conditions such as its insularity shaped by urban barriers, its heterogeneous commercial structures, bad road links with the community centre, the river Neckar and recreation areas, the lack of green space and the disturbance from traffic noise and major events gave the area a negative image. Approximately 450 residential units, partially implemented as building communities, are being realized on the site supplemented by infrastructure, services and non-disruptive businesses. The neighbouring Stuttgart district

of Veielbrunnen—a re-development area—is, with its 2240 inhabitants, a residential area with a particularly high proportion of residents who need social benefits. The proportion of non-German inhabitants is over 40 %; about 90 % of the children have an immigrant background. The percentage is well above the Stuttgart average of 58 %. The urban design goal of brownfield development is a lively district with numerous family-friendly apartments, a high-quality education, especially in the pre-school and elementary school sector, innovative approaches in the field of energy and service offerings, and an environmentally friendly business structure. The centre of the neighbourhood will be an attractive outdoor area and an education centre which unites different providers under one roof. "Education as a location factor "—a National Urban Development Policy demonstration project—has managed to anchor the importance of educational institutions in the public consciousness and urban policy (Fig. 5).

School as a Component of New Neighbourhoods—Summary

The research on innovative projects in Germany and Europe has made it clear that there is basically no shortage of successful architectural solutions and new experimental educational concepts. Education and childcare facilities require particularly careful urban and architectural planning and integration into the environment. Spaces and places are teachers, at least in the unanimous view of social workers and architects. There is no lack of examples of good architectural solutions, but a lack of coordination between different authorities and disciplines. Joint strategies for developing and formulating ideas often do not succeed (for instance future forums or model processes, joint planning with future users).

To implement pioneering educational landscapes in the re-shaped neighbourhoods, proactive, collaborative planning is necessary. The urban development policy should be linked—at all levels—with even more different political areas: education, social affairs, health, culture, labour and employment. An early introduction to the debate with all parties opens up new possibilities for living, learning and working in the city. Professional project management can be beneficial. The task of urban policy and neighbourhood development cannot include the reformation of the education policy, but we should realize that education is a central component of neighbourhood development.

During recent years—triggered by the shock of the 2001 PISA Study—new educational concepts have been created which require new spatial concepts, new skills, new educators and teachers, and different communication among the educational institutions. There is neither a lack of ambitious concepts in education, nor of good examples of architecture and interior design concepts. But there is rather a lack of cooperation at the interface between the two spheres, and, above all, a lack of targeted links with the city development and urban renewal. The educational

institutions in the city and their representatives are indispensable actors in the development of the neighbourhood and district: schools, day-care centres, community colleges and institutions for children and youth. Cooperation with housing associations and the involvement of local businesses can be a valuable contribution. Leaning does not only take place behind closed doors. District and public space are places of learning that have until today been significantly underestimated in their importance. When we consider education as part of urban development, the focus must be directed to locations and buildings. The quality of liveable urban areas is based on an urban situation in which functioning neighbourhoods and mixed structures can grow. For vibrant neighbourhoods, it is important to have urban and spatial integration over paths relations, and for educational institutions to open up to the district. This is possible if the institutions do not only fulfil their educational mission but also take action in and on behalf of the district and get involved in the process of urban development. Those tasks require not only a change of awareness among its actors but also a climate that is open to new ideas and provides resources.

Bibliography

Arbeitsgemeinschaft baden-württembergischer Bausparkassen (Ed.). (2002). *Wohnen mit Kindern* (pp. 53–54). Schwäbisch-Hall: Eigenverlag.

Butterwegge, C. (2012). *Armut in einem reichen Land. Wie das Problem verharmlost und verdrängt wird*. Frankfurt a. M: Campus.

GfK—Gesellschaft für Konsumforschung. (2013). Regensburg ist deutsche Singlehauptstadt. In GfK (Ed.), *Bevölkerungsstrukturdaten 2012*. http://www.gfk.com/de/news-und-events/presse/pressemitteilungen/seiten/regensburg-ist-deutsche-single-hauptstadt.aspx. Accessed 15 November 2013.

Harlander, T., Bodenschatz, H., Fehl, G., Jessen, J., & Kuhn, G. (2007). *Stadtwohnen. Geschichte, Städtebau, Perspektiven*. München: DVA.

Harlander, T., Kuhn, G., & Stiftung, W. (Eds.). (2012). *Soziale Mischung in der Stadt. Case Studie – Wohnungspolitik in Europa – Historische Analyse*. Stuttgart, Zürich: Karl Krämer.

Harnack, M., & Schluchter, S. (2009). Brede School Nesselande, Rotterdam (NL) – Ein Haus für Schule und Quartier in einer Neubausiedlung. In Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.), *Stadtquartiere für Jung und Alt – europäische Fallstudien* (pp. 39–44). Werkstatt: Praxis Heft 63.

Häußermann, H. (1995). Die Stadt und die Stadt-Soziologie. Urbane Lebensweise und die Integration des Fremden. *Berliner Journal für Soziologie*, (1), 89–98.

Häußermann, H., Läpple, D., & Siebel, W. (2008). *Stadtpolitik*. Suhrkamp: Frankfurt a. M.

Heitmeyer, W. (1998). Versagt die 'Integrationsmaschine' Stadt? In O. Backes, R. Dollase, & W. Heitmeyer (Hrsg.), *Die Krise der Städte. Analysen zu den Folgen desintegrativer Stadtentwicklung für das ethnisch-kulturelle Zusammenleben* (pp. 443–468). Frankfurt a. M.: Suhrkamp.

Hochschule für Technik Stuttgart. (Ed.) (2009). *Bildung als Motor der Quartiersentwicklung. Bildung als Standortfaktor. Ein Modellvorhaben der Nationalen Stadtentwicklungspolitik – Stuttgart Neckarpark*. Stuttgart.

Hübner, P. (2005). *Kinder bauen ihre Schule. Evangelische Gesamtschule Gelsenkirchen*. Stuttgart, London: Axel Menges.

Kataikko, P. (2012). Stadtbaustein soziale und schulische Infrastruktur. In C. Reicher (Ed.), *Städtebauliches Entwerfen* (pp. 143–150). Stuttgart: Vieweg + Teubner.

Kuhn, G., & Simon, C. (2004). Aktuelle Projekte in Deutschland. In Wüstenrot Stiftung (Ed.), *Wohnen im Eigentum in der Stadt* (pp. 63–197). Stuttgart, Zürich: Karl Krämer.

Kuhn, G., Dürr, S., Simon, C., & LBS-Stiftung Bauen und Wohnen (Ed.). (2012). *Räume zum Leben. Strategien und Projekte zur Aufwertung des öffentlichen Raums*. Stuttgart: Sparkassenverlag.

Landeshauptstadt Stuttgart (Ed.). (2007). *Revitalisierung des ehemaligen Güterbahnhofs Bad Cannstatt*. Stuttgart: Eigenverlag.

Menzl, M. (2010). *Das Verhältnis von Öffentlichkeit und Privatheit in der HafenCity: ein komplexer Balanceakt*. Wien, New York: Springer.

Rauterberg, H. (2013). *Wir sind die Stadt. Urbanes Leben in der Digitalmoderne*. Berlin: Suhrkamp.

Reicher, C. (2012). *Städtebauliches Entwerfen, Lehr- und Grundlagenbuch*. Vieweg + Teubner. Wiesbaden.

Statistisches Bundesamt. (2013). *Bevölkerung und Erwerbstätigkeit in Deutschland. Haushalte und Familien Ergebnisse des Mikrozensus 2012*. Wiesbaden. https://www.destatis.de/DE/Publikationen/Thematisch/Bevoelkerung/HaushalteMikrozensus/HaushalteFamilien2010300127004.pdf. Accessed 08 June 2014.

Stiftung, B. (2014). *Demografie konkret*. http://www.wegweiser-kommune.de/projekte/kommunal/nordrhein-westfalen/gelsenkirchen-kinder-bauen-ihre-schule. Accessed 07 June 2014.

Appropriating Spaces as a Form of Urban Education

Ulrich Deinet

Abstract In the first part of this chapter, the terms "indoor childhood", "isolation" and "suppression" are used to discuss aspects related to changes in public spaces for children and young people. These does not just mean conventional public space as a public area which people move about in within the town (town squares, parks, etc.) but also what is known as semi-public space which, in the form of shopping malls, fast-food outlets etc., can present a great challenge to young people. The school, too, has become a public space; it is used all day long as a place where children and young people live, and many school playgrounds are also open as public spaces even outside school hours. To understand how children and young people behave in different public spaces, the concept of appropriation, used in critical psychology, is especially suitable to shed light on children's and young people's behaviour as a way of appropriating spaces; as spacing, extending their sphere of action, changing situations, connecting different spaces, etc. This approach also reveals that appropriative behaviour always incudes educational aspects, not so much in the field of formal education but more in that of informal, "everyday" education.

Keywords Appropriation · Education · Educational landscape · Informal education · Spatial appropriation · Public space · Space for appropriation · Isolation · Spacing

This chapter deals with the changes to public spaces for children and young people, and their behaviour in open spaces, interpreted using the term "spatial appropriation". When young people use, shape and change public spaces, educational aspects play an important role, and must therefore be included in the development of educational landscapes.

U. Deinet (✉)
Faculty of Social Sciences and Cultural Studies, University of Applied Sciences, Münsterstraße 156, 40476 Düsseldorf, Germany
e-mail: ulrich.deinet@fh-duesseldorf.de

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Changes to Public Spaces for Children and Young People

When it comes to the issue of education in public spaces, the first question which arises is: What are public spaces for children and young people today? Urban sociology, urban geography and other sciences provide widely differing definitions for this field of public life, which is mainly characterised by its free accessibility. The following typification by Frey (2004) shows the transition from the conventional meaning of public spaces as green spaces, parks and streets to a view of them which also considers indoor public spaces:

- "open-air public spaces" (green spaces, parks, playgrounds, streets etc.)
- "publicly accessible indoor spaces" (department stores, shopping malls, railway stations, etc.)
- "institutionalised public spaces" (sports facilities, clubs, music schools, schoolrooms, church rooms, etc.) (Frey 2004, p. 223)

The last two typifications, especially, point to a quality of public spaces which is created through a certain type of use, i.e. spaces are given their specific quality by the way in which they are used, as well as by appropriation, reinterpretation and definition. This means that institutionalised public spaces (such as schools) may take on a specific quality in terms of appropriation to children and young people.

Schubert, by contrast, develops a far more nuanced view (cf. Schubert 2000, p. 60): his typification goes well beyond that of Frey to include, for example, virtual urban public spaces or mobile transit spaces (bus services, etc.). The term "pattern" gives an important indication of the particular definition and quality of spaces, which differ from one user group to the next.

From Street Socialisation to an Indoor Childhood and Youth

Over the last 30 to 40 years, research into childhood and youth has used many terms to describe the changes taking place during these stages, and even their disintegration, such as Neil Postman, who spoke of the "disappearance of childhood" as long ago as 1983. The term "destructuring of the stage of youth", used in the sociology of youth, also points to a fundamental change in this stage of life, which could once be relatively clearly defined as a moratorium; a status passage between childhood and adulthood. With regard to the conditions offered by social spaces, and thus to public spaces, the terms "indoor childhood" and "isolation" are central points of access to the changing stages of childhood and youth, which are increasingly taking place within institutions. This is currently influenced by the change in the school system from schooling until midday to the *Ganztagsschule*, which offers afternoon activities. This creates an image of the school as a central living environment, without the institutions themselves yet being able to shape this facet in any notable way.

"New" Public Spaces for Young People

In conventional public spaces, i.e. open spaces, streets, squares or green areas in our towns, young people are increasingly coming into conflict with other groups, especially with senior citizens, who make substantial use of public spaces. There are numerous conflicts of use in playgrounds, parks, etc., during which young people get into difficulty just from the way they join together, e.g. by appearing in a clique.

For this reason, young people are escaping to the freely accessible spaces which our society is offering in increasing number, i.e. the large commercial areas which have been built over the past few decades, and which appeal to every population group. This means that they do not have the fast food chains and shopping malls to themselves, either; however, a society which revolves around youth as much as ours does presents itself in these commercial areas, especially, in a youth-centred manner in terms of music, accessories, fashion, etc. From that point of view, young people cannot cause much real disruption in these places: it might be said that they take the offerings seriously, but also adapt the places in question for their own purposes. McDonald's has crept into the position of being Germany's most popular "youth centre", and the shopping malls exert such a fascination that even young people from distant rural regions travel hundreds of kilometres at the weekend to visit them. For young people, taking on the socially idealised role of the consumer is no problem at all; they are, after all, the group which is the best equipped in terms of media and the most skilled in terms of technology.

Summed up extremely briefly, a tendency could be described thus: instead of park benches, recreation grounds etc. being used as typical meeting points in public spaces, today indoor public spaces, such as McDonald's restaurants or the ubiquitous shopping malls, are increasingly taking on the functions of a meeting-place. These are fundamentally spaces which adults tend to judge as being problematic and negative, but which young people apparently see as having particular qualities. What is interesting is that the school repeatedly appears as a location, and has gained in significance, probably, in part, because of the "repositioning" of the school as it moves from schooling finishing at midday to the *Ganztagsschule*, offering afternoon activities. This is increasingly becoming a central place for children and young people to spend their lives; where they spend many hours of their day.

In view of the changes to the social spaces of childhood and youth, as outlined above, the concept of appropriation used in critical psychology, and its more advanced form, in activity theory, offers an important basis for understanding the behaviour of children and young people, and relating it to education according to the intention of this chapter. Starting out from the world being actively opened up, with the subject deliberately tapping into its physical symbolic and cultural meanings, the aspect of spatial appropriation takes on a special significance with regard to public spaces. The concept of appropriation provides a better understanding of the ways in which children and young people act in these spaces.

Spatial Appropriation as a Pattern of Behaviour in Young People

Young people are able to experience and bring life to important social spaces—not only the school but also commercial spaces such as shopping malls (cf. Neumann 2008), fast-food chains etc. in their own way, i.e. developing their own youth life there and creating their own spaces alongside the space's official function as an educational institution, shop, place to eat, etc. This takes place by means of redesignation and changing spaces and situations. Conditions are favourable, e.g. as they are not forced to buy food and many areas are relatively unrestricted.

Spacing: In view of the descriptions by Löw (2001, p. 231ff.) respectively by Scherr (2004) on the significance of "countercultural spaces", such spaces appear necessary in order for adolescents to develop agency when faced with the adolescent. Spaces of this kind come about when young people find a way to live out their cultures, or bring out some aspect of them. These processes can be understood as processes of appropriation.

The levels of thematisation and development in youth culture appropriation patterns can differ widely and may not be visible to other people. One key dimension of appropriation can be seen in (visible) physical displays (e.g. skateboarding) or by young people positioning themselves in "niches, corners and stages", as well as virtual displays in the media.

From the point of view of appropriation theory, public spaces can be interpreted as a place where young people create their own spaces, but to do so largely have to use or adapt to their structures and standards, especially when it comes to the key topic of consumerism.

Changing situations: another important act of appropriation by children and young people is independently changing the given situation. This dimension of appropriation is about altering individual structural elements of situations, such as changing the subject, environment and contexts of action. This is significant in that spaces which are accessible to adolescents and "which they can shape themselves are sources of self-esteem and places where they can experiment with themselves" (Böhnisch 1993, p. 124). Considering that adolescents are increasingly hemmed in within their environments, as outlined above, the question arises of what opportunities they have to make changes in situations in the given spaces and media environments.

Linking spaces: today, children and young people are growing up within an isolated lifeworld and a media-saturated society with new forms of communication, meaning not only that they develop discontinuous concepts of space but also that they develop the ability to inhabit multiple spaces at once. They build links between different spaces, such as the specific geographical spaces where they currently find themselves (given meaning through appropriation so that a social space develops) and distant places and social spaces which they can communicate with at any time (by mobile phone/smartphone or on their computer) and virtual spaces on the Internet (chatrooms) which are sometimes also understood as social spaces. Thus,

indicators for the appropriation of different spaces can be seen in links between both specific geographical islands and virtual spaces.

The aspects of youthful behaviour in public spaces ("spacing", etc.) described under the concept of appropriation can be further interpreted in light of the discourse on education.

Public Spaces as a Space for Appropriation and Education, as Part of the Educational Landscape

In terms of the usual differentiation of educational processes in formal, non-formal and informal, the means of appropriation outlined above fit especially well into the category of informal education. As public spaces offer settings for youthful behaviour patterns in peer groups, scenes and cliques, they also provide a stage for the informal educational processes which take place there. Over recent years, increasing emphasis has been placed on the importance of this type of education (e.g. BMFSFJ 2005).

The term "everyday education", coined by Thomas Rauschenbach, also backs up the idea of informal fields of education which play a significant role in children's and young people's everyday lives. Public spaces also provide the right conditions for these fields, as this is where children and young people can escape to some extent from the excess institutional burden placed on them as part of the *Ganztagsschule* system, etc. Though they also experience life within a peer group in such institutions, that life can develop very differently in public spaces without the presence of adults or teachers. However, the term "everyday education" also emphasises the importance of the everyday (of the local, seen from the point of view of social space theory), described by Coelen (2000) using the concept "municipal education".

What is significant is the interrelationship between the different fields of education, rather than how they are segmented. The significance of informal educational processes is recognised (indirectly) in the school system, e.g. in that the classroom atmosphere, functioning relationships in the classroom etc. are considered highly important for formal education processes to be a success.

Accordingly, these places and spaces where informal, everyday, local, municipal appropriation and education processes occur also need to be a topic brought up by developing educational landscapes. Using a broad definition of education, it cannot suffice merely to improve communication between the educational institutes, however important and sometimes also difficult that may be. For this reason, when a local educational landscape is planned and designed, public spaces play an important role: on closer examination, they are spaces of appropriation and education of the kind outlined above.

However, in the study on local educational landscapes produced as part of the project by the German Youth Institute (Deutsches Jugendinstitut, DJI), "Local Education Networks in Cooperation of All-Day Schools and Youth Services", the

authors complain, among other things, that in the local education landscapes they investigated, not enough focus was placed on the perspective of informal and non-formal education as outlined here. “In the researchers’ view, the neglect of the subject/appropriation perspective needs to be identified as the most important desideratum when designing local education networks. This is in stark contrast to the key perspective named consensually across all institutions and regions: that of an ‘integrated’ understanding of learning and education” (Bradna et al. 2010, p. 168).

The aspect which the DJI authors complained of—the failure to consider appropriation—could particularly be brought into the developing educational landscapes by mobile and community youth work. No other field of youth welfare operates so greatly within public spaces. Even its institutional conditions—especially the principle of openness and the physical design of institutions, with their open areas—makes youth work a fundamental part of public space for young people. Many services involve various institutions in their work, which takes place in public spaces, e.g. by supporting cliques in parks, etc. or setting up hangouts for young people in public spaces.

Youth work focusing on social spaces understands subjective educational processes, especially, as processes of appropriation within social spaces, taking place in social spaces, or the spaces which children and young people create for themselves. These often contrast with official, institutionalised educational spaces and places of the kind which currently form the main subject of discussion on local educational landscapes. Based on the concept of appropriation, community work with children and young people can contribute to an understanding of educational places and spaces covering multiple dimensions, opening them up to the discussion on local, regional or municipal educational landscapes.

Bibliography

BMFSFJ—Bundesministerium für Familie, Senioren, Frauen und Jugend. (2005). *Zwölfter Kinder und Jugendbericht: Bildung, Betreuung und Erziehung vor und neben der Schule*. Berlin: BMFSFJ.

Böhnisch, L. (1993). *Sozialpädagogik des Kindes- und Jugendalters. Eine Einführung*. Weinheim, Munich: Juventa.

Bradna, M., Meinecke, A., Schalkhausser, S., Stolz, H.-J., Täubig, V., & Thomas, F. (2010). *Lokale Bildungslandschaften in Kooperation von Ganztagsschule und Jugendhilfe. Unveröffentlichter Abschlussbericht*. Munich: Deutsches Jugendinstitut e. V.

Coelen, T. (2000). *Kommunale Jugendbildung*. Raumbezogene Identitätsbildung zwischen Schule und Jugendarbeit. Frankfurt a. M.: Peter Lang.

Frey, O. (2004). Urbane öffentliche Räume als Aneignungsräume. Lernorte eines konkreten Urbanismus? In U. Deinet & C. Reutlinger (Eds.), *„Aneignung“ als Bildungskonzept der Sozialpädagogik. Beiträge zur Pädagogik des Kindes- und Jugendalters in Zeiten entgrenzter Lernorte* (pp. 219–234). Wiesbaden: VS.

Löw, M. (2001). *Raumsoziologie*. Suhrkamp: Frankfurt a. M.

Neumann, U. (2008). *Jugendliche in Shopping Malls*. Magisterarbeit an der Carl von Ossietzky Universität Oldenburg. http://www.stadtforschung.uni-oldenburg.de/download/Magisterarbeit_Neumann_2008.pdf. Accessed September, 11 2013.

Postman, N. (1986). *Das Verschwinden der Kindheit*. Frankfurt a. M.: S. Fischer.
Rauschenbach, T. (2009). *Zukunftschance Bildung, Familie, Jugendhilfe und Schule in neuer Allianz*. Weinheim, Munich: Juventa.
Scherr, A. (2004). Rückzugsräume und Grenzüberschreitungen. Wie sozialräumliche Jugendarbeit Bildungsprozesse unterstützen kann. In U. Deinet & C. Reutlinger (Eds.), *„Aneignung" als Bildungskonzept der Sozialpädagogik. Beiträge zur Pädagogik des Kinder- und Jugendalters in Zeiten entgrenzter Lernorte* (pp. 161–174). Wiesbaden: VS.
Schubert, H. (2000). *Städtischer Raum und Verhalten. Zu einer integrierten Theorie des öffentlichen Raumes*. Opladen: Barbara Budrich.

The Neighbourhood as a Place of Learning for Young People

Andrea Benze and Urs Walter

Abstract In the context of architectural teaching at TU Berlin and work with children and young people on the relationship between culture and construction, research is carried out into the role which planning games can play in establishing the neighbourhood as a place of learning. This means not only learning in and about the neighbourhood, but also seeing the neighbourhood as a space in which various experts can have their say and negotiate on future developments. Personal experiences of space are just as important as cultural, social, functional and economic relations. Games (in this case planning games) make a suitable tool, as they can be used in urban development, not only analytically but also for research and activation, and appeal to children, young people and adults. Existing planning games are to be used to reveal possibilities and boundaries, involving laypeople in urban development. Two games specially developed for a neighbourhood are used to show how the dynamics of a planning game can be used for research within the area and to create future scenarios, leading to sometimes surprising results.

Keywords Planning games · Urban development · Educational landscapes · Participation · Education on the cultural relationship to construction · Spatial perception

Streets and public places are important spots for children and young people to spend their time. However, when such places are being planned, these groups are barely taken into account. Therefore, neighbourhoods, as places of learning, can be understood in two ways: Children and young people learn from a district by reading, analysing and understanding it; in addition to this, young people are already experts in their everyday life in the neighbourhood. Their knowledge is

A. Benze (✉)
Hochschule München, FK 01 Architektur, Karlstraße 6, 80333 Munich, Germany
e-mail: andrea.benze@hm.edu

U. Walter
German University Cairo, Cairo, Egypt
e-mail: urs.walter@guc.edu.eg

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indispensable for developments in the district. Ideally, the neighbourhood is a space for learning in which different experts have their say, learn from one another and plan future developments together.[1]

Here, the neighbourhood is understood not just as a built-up area but as a varied political, social, cultural and economic network, in which individuals have different spatial experiences.[2] These involve a large number of fleeting combinations, interrelations and meanings, which require mediating, activating tools to make them visible and accessible. In this context, games are particularly fertile ground, as they can tie in with children's and young people's lifeworlds, and have both an analysing and activating character: games are "used to build models which can be used to better understand reality; this does, however, also change reality" (Rötzer 2013, p. 9).

Rötzer (2013, p. 21) distinguishes between games which are described as such in everyday life (where the players are aware that they are playing a game) and games which "are played in reality—and have to be played, even if we are not aware of the fact that they are games and we are players in them". This possible double role of the game as a self-contained world and as an illustration of, or even part of reality, is what makes games such fertile ground for urban development. Real conflicts can be acted out at a distance from prejudices and well-rehearsed routines.

Can the City Be a Game?

In recent years, some games have evolved which are used as a means of participation in urban development. In Germany, one worth mentioning here is "Stadtspieler" (City Player), a board game created as part of a pilot project on national urban development policy by the former Federal Ministry of Transport, Building and Urban Development (BMVBS). Mainly following an educational approach, it is designed to give players a fundamental awareness of urban planning processes, unconnected to any specific issues around urban spaces. In Britain, the "Building Futures Game" opens up considerably further-reaching opportunities. This was brought out officially as a "workshop in a box" in 2008 by the Royal Institute of British Architects to enable local initiatives with no previous planning experience to participate in the development of their city area.

[1]Compare the term *agora* as "the new public space where science and society, the market and politics, co-mingle" (Nowotny et al. 2004, p. 253).

[2]See Michel de Certeau: "space is a practiced place. Thus the street geometrically defined by urban planning is transformed into a space by walkers" (de Certeau 1984, p. 117). This refers to the meaning of the fleeting moment in which a certain person walks along the street, drawing the conclusion that there are "as many spaces as there are distinct spatial experiences" (de Certeau 1984, p. 118).

"Play the City" from Amsterdam follows a different strategy. A team of architects and urban planners developed a facilitation process in the form of a live role-play game allowing a large number of people, such as local actors and interested parties, to participate in specific urban development projects. The following will offer a description of how these two planning games (the "Building Futures Game" and "Play the City") use different means to give laypeople an understanding of planning processes and (following Rötzer) to create simulations allowing what goes on in reality to be better recognised and controlled. The aim is to test the extent to which these games can make even ephemeral city structures and individual experiences of space usable for the planning process. The subsequent chapter then presents two games which make young people, in particular, capable of examining their neighbourhood as a space for learning and of proposing possible developments.

The City as a Happy Families Game

The British "Building Futures Game" is a set which comes in a box and can be used to develop specific developmental scenarios for any area as a 10-year step-by-step plan which can be discussed in the neighbourhood and with the planning authorities. The idea of the "Building Futures Game" is to learn from the plans they make. At the heart of the game are 56 "Proposal" cards with best-practice examples. As in a game of Happy Families, they are sorted into categories following a points system, and can be negotiated during the game as possible development aims for the area.

To prepare for the game, the players define the narrative framework with *event cards*. Based on the players' own judgement, statements are made which describe the district and raise some fundamental problematic issues. *Statement cards*, which describe possible futures in everyday language, introduce the players to the terminology used in planning processes. Based on their local knowledge, players can judge whether they consider certain developments appropriate, whether they welcome them or view them with concern. Together, they can use *proposal cards* to create future scenarios.

The different stages of the game are set out on evaluation posters, providing a clear overview of results which is easy to follow for later planning. The game does, however, call for a great deal of baseline motivation on the part of those involved. The entire game is planned as at least a half-day workshop. The game materials give players a deep insight into the possibilities of urban planning concepts, though the selected planning categories and examples guide them towards a certain viewpoint. Unconventional proposals which push the envelope of pre-given categories are less likely to be expected.

The City as an Arena

Unlike the "Building Futures Game", "Play the City" does not only use the opportunities which the game offers to come up with initial ideas for programme development. The idea is to involve as many actors as possible in a role play which simulates a long planning process; this decision-making process is intended to create an "evolution of ideas" (Tan 2009). "Play the City" thus falls somewhere between project facilitation and a game. The main clients using "Play the City" are municipal and private district developers.

Intensive research before the game is used to create a special game set for each planning project. This reflects the actual economic, political and social set of interests in a simplified form (cf. Christiaanse 2012). The game is played in a room-sized model of the situation with a realistic level of development and, ideally, with the actual interested parties and decision-makers. In the game, they take on roles which reflect their real-life position, with their options and obligations clearly defined within the game. The well-researched dataset is intended to ensure that newcomers to planning and professionals can negotiate on a level playing field with regard to specific neighbourhood issues.

A space for negotiation is created which enables a wide variety of ideas to be brought into urban planning, helping the district to be developed in line with needs. During the game, experience is simulated and negotiation is used to encourage strategic alliances and an understanding for others' interests. Across several moves, realistic planning scenarios are created which are evaluated by the facilitation team and made accessible to the public. The motto "Do not plan, play the city" (Tan 2009) underlines the fact that any planning process already bears certain characteristics found in games, which can be portrayed in abstract form within a game. The planning game creates an artificial framework allowing players to fast-forward through developments, revealing the key aspects of planning. They thus set off on an experimental journey into the future, simulating innovative results which have not yet been taken into consideration.

The Neighbourhood as a Playing Field

Though the "Building Futures Game" and "Play the City" follow very different approaches, they show that planning games can be, and are, used to develop specific locations. In both games, the players are addressed as experts on their neighbourhood, and clever use is made of the potential of the game situation, somewhere between reality and imagination. Both games do, however, neglect the players' personal experience of spaces and thus related indications of ephemeral local structures or informal phenomena: the planning game's potential for a neighbourhood as a place of learning is not fully tapped.

Below, two games will be presented which were developed for specific situations in the Berlin borough of Neukölln. Both games explicitly include individual spatial perceptions, and can thus be used as a research tool for the neighbourhood and as a planning tool for developing future scenarios or for unusual strategic alliance within the neighbourhood. The ideas behind the games can be transferred to other places.

Young People Discover the Educational Potential of Their Neighbourhood

The planning game "Agenten & Komplizen" (Agents and Accomplices) was created at the Institute of Architecture on behalf of the Donaustraße-Nord Neighbourhood Management scheme and developed especially for the Donau neighbourhood in the north of Neukölln. The game looks into how the Rixdorf primary school could open up to the district, doing justice to its new role as a place to learn and live all day long and to society's aspiration to learn at every stage of life. The plan is to track down existing educational potential in the neighbourhood and link it in with the school. As with "Play the City", the key focus of the game is on joint negotiation on actual and simulated experiences. The game reveals places and actors which are important for the people in the neighbourhood, uncovering previously hidden and informal potential which can be used as an educational resource. Players discuss which fields of education should be boosted in the neighbourhood and form new strategic alliances for innovative educational networks in the neighbourhood based on their local knowledge.

In brief stages, a wide range of different strategies are produced with the help of a large number of different players. The game makes it easy to gain access to widely differing sectors of the local population. The game was played by about 70 Architecture students in 70 local rounds.[3] As well as organised games at clubs or initiatives, many games took place spontaneously in cafés or pubs. As the main exchange of ideas during the neighbourhood game is between the players, discussions are generally very lively and there is no hierarchical structure, with the interviewers as supposed experts and the interviewees as laypeople (see Figs. 1 and 2).

The game results portray the neighbourhood from the point of view of its residents, including informal, ephemeral phenomena typical of the area Altogether, the 187 players who took part in the game identified almost 170 places thought to have a positive influence on the neighbourhood, and to which the players ascribed specific educational potential (see Fig. 3). The educational categories proposed in the game are used to position these places in an urban planning context. For example, the neighbourhood streets, which might come across as inhospitable for

[3]See the detailed documentation by Benze et al. (2013) and abstracts in Benze and Walter (2012, 2013).

Fig. 1 Schoolchildren discuss their favourite places in the neighbourhood (Photograph © TU Berlin)

Fig. 2 Young people come up with strategic alliances for new neighbourhood educational networks (Photograph © TU Berlin)

outsiders, are considered important places for meeting and moving around. Everyday retail outlets such as supermarkets, department stores and shopping centres are brought in by children and adults as places for learning about health and nutrition or how to deal with money. This allows certain places to be seen in a whole new light.

The game looks into the strengths of the neighbourhood, leaving aside negative clichés, which strengthens people's positive identification with their own surroundings in a neighbourhood which is generally associated with deficits. The scenario stage of the game should be understood as an ideas generator which can be very fruitful at an early stage of neighbourhood analysis and to define concrete planning tasks. Many of the starting points for change cannot be identified by analyses employing standard tools (e.g. the Integrated Urban Development Plan, INSEK, or the Integrated Action and Development Plan, IHEK).

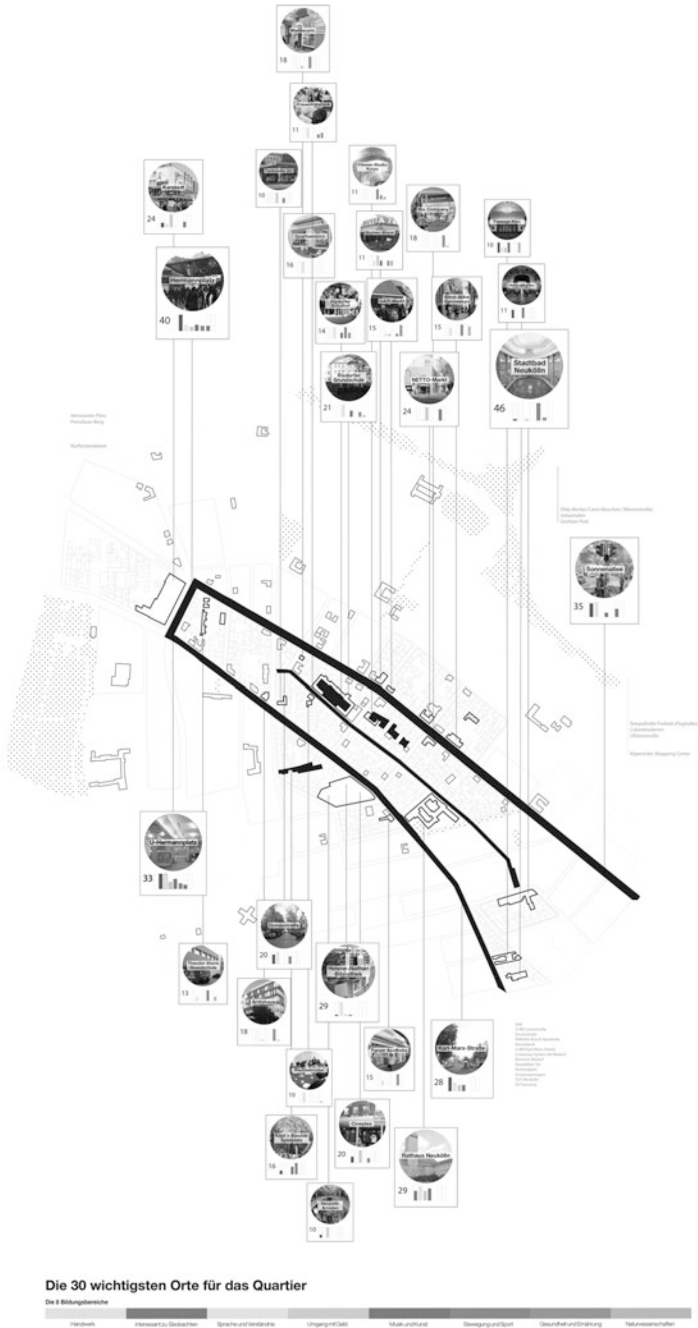

Fig. 3 Map of educational potential—the 30 most important places in the Donau neighbourhood, of 176 mentioned (Photograph © TU Berlin)

Young People Negotiate the Rules for Their Neighbourhood

The “Karl-Marx-Spiel” (*Karl Marx Game*) came about as part of the [Aktion! Karl-Marx-Straße], an initiative by Neukölln District Council. During a participatory workshop, young people got together with students at TU Berlin (Berlin Institute of Technology) to develop the “Karl Marx Game” as a staged planning tool with which they can actively involve their points of view and needs in the development of the public space along Karl-Marx-Platz in Neukölln. They created a sensitive participatory tool which sounds out existing lines of conflict in a playful, inventive manner and offers possible ways to overcome them: a scenario game for the future of the square which reflects the rules according to which people get on together in everyday life.[4]

Karl-Marx-Platz in northern Neukölln is a square where many actors (sometimes with contradictory needs) work, trade, live and carry out community activities. In this densely developed area, the square offers one of the few public spaces where young people, who make up a growing part of the population, can meet.

Similarly to “Play the City”, the young people used precise observations of the square to develop playing characters modelled on actual people and groups. During the game, they set forth skills and needs which were previously not taken into account, but which make perfect sense. For example, a child playing has the power to liven up the square and motivate other children to go outside, too. A street musician has the power to change the atmosphere of the square for a moment, while a market stall operator creates temporary hiding-spaces thanks to the crowds visiting the market.

The players take on the roles of altogether 13 different characters with different, sometimes complementary strengths when it comes to pushing through their specific interests. On a table-sized playing board, an abstract representation of Karl-Marx-Platz, they negotiate 117 specific goals for using the square, reflecting the particular needs of the people in the neighbourhood (see Fig. 4): from a self-service vacuum cleaner for car enthusiasts to a racetrack for sportspeople; from a dog talent agency to a shady park bench. The characters can achieve some of the goals on their own; for other goals they need co-players as partners. This forces the players to discuss their plans intensely so as to forge alliances with one another (see Figs. 5 and 6).

The game is based on precise observations both of the square’s qualities and of its deficits, which the young people use to derive requirements for how the square should be organised in terms of time and space. For example, the shops which move into the retail premises are an important indicator of the square’s attractiveness. At different times of day, the players have different opportunities to affect the programme in the centre of the square, the street and the retail units.

[4]See the full documentation at http://kms-nk.net/?p=30. The young people involved tested the game locally with residents at markets and neighbourhood fêtes, and it is now at Neukölln borough council City Planning Office.

Fig. 4 The neighbourhood as a space for learning—young people play out future scenarios for Karl-Marx-Platz, on Karl-Marx-Platz (Photograph © TU Berlin)

Fig. 5 117 missions tell the story of the needs of the neighbourhood people (Photograph © TU Berlin)

Fig. 6 13 characters from the neighbourhood with unexpected skills (Photograph © TU Berlin)

The game does not involve any proposals for shaping the structure of the square; instead, players create opportunities for cooperation, dual uses, hybrid mixtures of uses and priorities. Unlike "Play the City", they do not only negotiate interests related to the economy and building law; the game also reveals fleeting phenomena. The game concentrates on the process through which urban situations are developed and raises players' awareness of the importance of negotiation, compromise and cooperation. As with "Play the City", the game situation is clearly felt to be a game, but at the same time it is a model which can help provide a better understanding of reality. This provides the perfect arena for individual actors to outdo themselves and for creative solutions to come about.

Urban Development in Dialogue with Young People

The neighbourhood has a dual meaning as a space for learning. Firstly, it is a place in which and from which people can learn. Children and young people learn to understand social, cultural and political situations by observing and analysing what goes on in the neighbourhood. This is what they do outside in the neighbourhood. Secondly, young people are part of the neighbourhood; it is where they gain personal experience of spaces, and they are experts in the neighbourhood and their needs in the city. The neighbourhood is also a space for learning, as a place where different interests and needs are negotiated. To gain new knowledge about the future development of the neighbourhood, a great deal of different expertise should be taken into account, even that which initially appears of minor importance. "Agents and Accomplices" and the "Karl Marx Game" show that planning games are a particularly good way to tap into this ephemeral expertise, as the players argue their personal points of view in the temporary reality of the game, and because they can transfer their everyday experiences to the abstract context of a game.

The strong point of games is that they break down existing hierarchies, and that players with different levels of prior knowledge can enter into discussion on an equal footing. This makes games the perfect tool for young people to participate equally in planning processes, even those which are long and complex. The example of "Play the City" shows clearly that these processes can be simplified into an exciting role-play, and used by a highly heterogeneous team of players to develop both specific and visionary contributions towards urban development.

However, both the concept of "Play the City" and that of the "Building Futures Game" offer only few footholds for young people to become involved. They both require a great deal of motivation and time, and are aimed at specific development targets for roughly a decade, which is far beyond the imagination of adolescents. At the same time, they do not take into account the players' particular insights into their area, which would mark out young people as indispensable experts.

By contrast, "Agents and Accomplices", as a research tool, is based on individuals' personal experiences of spaces in the neighbourhood, simplifying some of the analytical categories from the "Building Futures Game" and transferring them to

another context. It shows how a "pub-friendly" game lasting about 30 min can reveal countless surprising, unexpected ideas about possible development strategies. As a staged planning game, the "Karl Marx Game" picks up on and alters the idea of "Play the City". The game's development is already part of the planning process, which also extends the basic concept of participation. As developers of the game, the young people not only express their own needs but also put themselves in others' shoes, experiencing the needs of other user groups within the neighbourhood. While players mainly negotiate aspects relating to financing and building legislation in "Play the City", the "Karl Marx Game" adds aspects linked to their personal experiences of spaces. Everyday rules and limits which affect how people perceive the quality of urban life can thus be set up as parameters in the game.

The game results show that young people are in possession of expert knowledge which is indispensable for a qualitative investigation of the public sphere; a knowledge which can be tapped into by means of brief workshop formats. Seeing the neighbourhood as a place of learning means setting up a continuous dialogue between young people, residents and people rooted in the area, as well as with those responsible for urban development. Games, such as planning games, can be used to involve young people on an equal footing at different stages of planning. Even playing once within a neighbourhood has a lasting effect as an equal exchange of ideas.

Bibliography

Benze, A., & Walter, U. (2012). Agenten & Komplizen – Strategische Partnerschaften zwischen Schule und Stadt. *Die Grundschulzeitschrift, 255*(256), 14–15.

Benze, A., & Walter, U. (2013). Agenten & Komplizen – Planspiel zur Recherche möglicher neuer Bildungsallianzen im Quartier. *Planerin 1_13*, 40–42.

Benze, A., Helfen, T., Hofmann, S., & Walter, U. (2013). Agenten & Komplizen – Strategische Partnerschaften zwischen Schule und Stadt in Neukölln. *Architektur als sozialer Katalysator Bd 4*. http://www.ub.tu-berlin.de/index.php?id=8271#c44005. Accessed July 25, 2014.

Christiaanse, S. (2012). *Interview on play the city*. Carried out by Urs Walter on 23 November 2012 at TU Berlin.

de Certeau, M. (1984). *The practice of everyday life* (S. Rendall Trans.). Berkeley: University of California Press.

Nowotny, H., Scott, P., & Gibbons, M. (Eds.). (2004). *Wissenschaft neu denken. Wissen und Öffentlichkeit in einem Zeitalter der Ungewissheit*. Weilerswist: Velbrück Wissenschaft.

Rötzer, F. (2013). *Ist das Leben ein Spiel? Aspekte einer Philosophie des Spiels und eines Denkens ohne Fundamente*. International Flusser Lectures. *Cologne*: Walther König.

Tan, E. (2009). *Do not plan, play the city—Opening design and governance to the people*. http://www.playthecity.nl/. Accessed February 25, 2014.

Games

Agenten & Komplizen: Benze, A., & Walter, U. (concept and design), Fachgebiet Partizipatives Entwerfen und Konstruieren, Prof. Susanne Hofmann, Institut für Architektur TU Berlin (Eds.). (2011). *Agenten & Komplizen – Ein Quartierspiel deckt Möglichkeiten auf.* Berlin.

Building Futures Game: AOC Architects, Urbanists und Cultural Interpreters (concept and design), Royal Institute of British Architects & Commission for Architecture and the Built Environment (Eds.). (2008). *Building Futures Game*. London. http://www.buildingfutures.org.uk/projects/building-futures/the-building-futures-game. Accessed 25 February 2014.

Karl-Marx-Spiel: Benze, A., Heinrich, J., Jiménez Mattsson, C., & Walter, U. (concept and implementation). (2013). *MitSpielen participatory workshop as part of [Aktion! Karl-Marx-Straße] Neukölln borough council, Berlin*. http://kms-nk.net/?p=30. Accessed February 25, 2014.

Play the City Studio: Tan, E. (2009). *Do not plan, play the city—Opening design and governance to the people*. http://www.playthecity.nl/. Accessed February 25, 2014.

Stadtspieler: Netzwerk-Agens e. V. (Ed.). (2009). *Stadtspieler*. Pilotprojekt im Programm Nationale Stadtentwicklungspolitik, gefördert vom Bundesministerium für Verkehr, Bau und Stadtentwicklung. Hamburg. http://www.stadtspieler.com/. Accessed February 25, 2014.

Young People's Appropriations of Life and Education in the City

Joana Lúcio

Abstract It is in the city that one finds better and more diverse opportunities for acquiring knowledge, developing skills and experiencing significant interactions that enable the construction of identity and a sense of "belonging." As individuals and as part of groups, young people have their own ways of perceiving, living and imagining the city as a space of creation, conviviality and memory. In this paper, we will present and discuss data pertaining to the urban social and educational experiences of over 80 boys and girls between the ages of 5 and 17, from Porto (Portugal). We will discuss ways in which space and its fruition influence the construction of a sense of "community," as well as the meanings, manipulations and projects that young people allot to the city.

Keywords Urban education · Youth · Citizenship · Participation · Community development · Educating City · Qualitative research · Focus groups

Cities today, larger and more densely populated than ever, are also, increasingly, contexts for isolation and exclusion (Sennett 2002; Borja and Muxí 2003). In the context of the city, and especially the cities of the contemporary Western world, we can identify a number of obstacles to the construction of a viable image of the space one inhabits (Benevolo 2006; Lynch 2007, 2009; Ascher 2010). Nevertheless, cities are privileged spaces for the integral development of individuals and groups.

A shared experience of space is a fundamental condition for the dynamics of cooperative work to emerge, since it is this common understanding that a certain space (the city, the neighborhood, the street etc.) is full of both individual and collective meanings and memories that allows the emergence of the city as a platform for education and development.

"First we shape the cities—then they shape us" (Gehl 2010); what is, then, the role of young people in this process over which they have, for the most part, little (if

J. Lúcio (✉)
CIEC, Instituto de Educação, Universidade do Minho, Campus de Gualtar,
4710-057 Braga, Portugal
e-mail: joana.lucio@gmail.com

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any) influence? In this paper, we will discuss the ways in which young people meet the standards of "urban experience", but also the ways in which they subvert these conditions and shape themselves the spaces, the times and the future of urban contexts.

This paper presents original data obtained over the course of the project "Massarelos, Educating Civil Parish", developed in Massarelos, Porto (Portugal), between December 2007 and July 2011. This project was part of a Doctoral research and its final product was a thesis presented at the Faculty of Psychology and Education Sciences of the University of Porto in May 2012, titled "Social and Educational Mediation in the Construction of an Educating City" (Lúcio 2011).

The City: Urban Space, Public Space and Educational Meaning(s)—A Framework

In "The Image of the City", Lynch (2009) discusses the relationship between structure and identity, establishing that a viable image depends on the acknowledgement of a peculiarity. This can only be made possible through a structural or spatial connection of the object (in this case, the city) with they who observe it and with other objects.

If we consider the current situation in a few European capitals, we can identify a series of more or less homogenous traits: the progressive desertification of urban historical centers or their transformation into areas of commerce and services (as opposed to residential areas); a certain "ghettification" of green areas (which are progressively pushed towards the city's outskirts, gathered into massive parks); the transformation of streets into spaces of traffic (of vehicles and people), as opposed to their appropriation as spaces of permanence, gathering and creative use (for adults, but also young and elderly people); the urban preference for vertical building arrangements (the building perpendicular to the street), as opposed to occupation rationales based on a continuity between the open space (≈public space) and the closed space (≈private space). All of these constitute effective limitations to the relationship between the individuals and the city, as they interfere with the production of practical and emotional meanings. This phenomenon is often related to the buildings' configuration, and to whether they include elements that induce a sense of barrier (narrow entrances, gates, significant unevenness on the pavement, bollards to prevent cars from parking etc.). In his book "Cities for People", Gehl (2010) illustrates these limitations by referring to the buildings' edges, pointing out that "the edges provide the opportunity for life in the buildings or immediately in front of the buildings to interact with life in the city" (Gehl 2010, p. 75). These edges (window sills, staircases, doorframes and others) can be, and frequently are, used as areas for staying and resting, as "our backs are protected, and our frontal sensory apparatus can comfortably master the situation" (Gehl 2010, p. 75)—and can potentially be areas for experimentation and interaction. When that does not

happen, i.e. when what people encounter are "long closed walls, few doors, sterile glass sections that signal 'move on'" (Gehl 2010, p. 81), there are fewer reasons to remain in the street and allow oneself to dwell in the shared experience of the public space. In "Good City Form", Lynch (2007) argues that "the identity of a place is intimately connected with personal identity. The statement 'I am here' supports the statement 'I am'" (Lynch 2007, p. 128).

According to Ascher (2010), one of the main traits of contemporary urban life is a constant questioning produced by the diversity and the intensity of stimuli and demands: the level of uncertainty (and risk) rises exponentially, and people can hardly draw upon their own memories of similar challenges or those of significant others. This happens, among other reasons, because proximity and co-presence are no longer determining factors for many social practices. This "de-localization" of interactions "translates effectively into a progressive weakening of local communities" (Ascher 2010, p. 39). In practice, this means that people can easily develop the several facets of their lives in completely distinct contexts, between which there is no link other than the individual itself: hour-long daily commutes are fairly common; extended family members often live several hundred kilometers apart (or even in different countries); with the rapid ascent of virtual social networking (Facebook, Twitter, Skype etc.), a significant percentage of free time is spent online, where one often interacts with people one has never met face-to-face. This ubiquity and multi-temporality translates into reticular social structures, "based on weak and fairly numerous links" (Ascher 2010, p. 46).

The concept of "city" that we explore here is, in our view, more closely related to the word's Greek root, *polis*, which does not refer to the ensemble of spaces, but rather to the exercise of citizenship. Likewise, the Latin word *civitas* refers to the group of citizens, bound by law, which grants them responsibilities and duties. Therefore, the Roman *civitas* was not a gathering of individuals, but rather what linked them as citizens. So, this is a discussion about the city as a territory, and not so much as an administrative entity (hence, the idea of an "Educating Civil Parish", by reference to the concept of Educating City, which will be discussed further on). This territory is not only a context, but also an identitary construct.

It is through a process of subjectivation that a certain space becomes a "place" or territory: the interaction that one establishes with the physical elements of the city constitutes a symbolic dialogue that informs the definition of one's individual and relational identities: "the city, the urban space, the streets, the buildings, need to have a significant order for us, well-defined limits onto which we can project our inner world" (Canadell and Vincens 2010, p. 38).

With globalization, we have witnessed not so much a dissipation of the territory, but rather a reconfiguration. In contemporary cities, individuals and groups experience a multitude of territories: physical territories, such as the house, the workplace, leisure areas, the street; virtual territories, such as online social networks; emotional territories, such as the family and friendships; global territories, such as European citizenship. Some of these territories interconnect, while others are entirely separate. In all of them, the individual takes on a series of roles that are, in the end, aspects of their identity.

What do we mean when we try to establish a connection between "city" and "education"? What role do educational processes and phenomena have in urban and communitarian development? Roig (2007) states that "the future of a city is tightly linked to the educational process […] understood as the process of acquiring knowledge and learning values […]. It is an always-unfinished process, of permanent learning, that takes place through the relationship with others" (Roig 2007, p. 173). From this, we can draw a series of key points for the discussion: the tight correlation between education and development (in the sense of progress); the idea that learning, and education in a broader sense, are not limited to the transmission of content, with the shared construction of a value system and rules of conduct also playing an important role; the idea that the educational process takes place along and across the individual's life; and, finally, the idea that the educational process is, like most human actions, a relational process.

With the massification of education, and the belief in it as a lever for social ascent, we have witnessed a progressive broadening of the school's mandate. It has become, in some contexts, the main instance of socialization, where young people experience:

- most of their contact with peers and adults,
- contact with a value system,
- rules of conduct and diversity, and
- the development of a sense of identity, based on the apprehension and the expertise of certain (linguistic, esthetic, behavioral) codes.

The relative success with which the academic educational model has colonized the families' lives has, to a certain extent, led to the progressive upstaging of other dynamics that do not fit the same structure: non-formal and informal logics of socialization (such as those one experiences with peers, with the elderly, in the street, within citizens' associations etc.) have lost relevance in view of the goal of a diploma.

In summary, the city is a context in permanent transformation and, in most cases, expansion. Because a large percentage of the world population is concentrated in urban areas, these are, inevitably, contexts of gathering and potential conflict. Despite that—or because of that—they are especially favorable to the integrated development of people and communities.

Education is multidimensional and multireferential. Urban spaces, while eminently physical, are also social constructs, even in terms of the definition of their limits. Aside from their condition as meaningful spaces, cities are also contexts for individual—but also collective, and even communitarian—action and appropriation. The city as dialectics is particularly relevant in this sense, since what is at stake is not consensus, but rather participation. It is participation, in its plurality, that warrants the emergence of initiatives that truly respond to the citizens' demands. The "collective" emerges with the purpose of configuring fuller and more complex ways of experiencing citizenship and human rights.

Methodology

The project "Massarelos, Educating Civil Parish" was based on the principles that founded the Educating Cities Movement, which conceives the city as an educational environment ("it is possible to *learn in the city*"), an educational content ("it is possible to *learn the city*") and an educational agent ("it is possible to *learn from the city*"). As it had a clear focus on the issues of social and educational mediation, this project (and the research process that framed it) intended to firstly discuss the principles which guide the type of organization of urban life proposed by the Educating City model and the ways by which rendering the city a more educative space is being/can be achieved. Secondly it aimed to discuss the role that mediation platforms and professionals can have in managing the decentralization and deinstitutionalization processes envisaged within this paradigm.

The operationalization strategy used in this project was based on the concept of the Integrated Training System (Villar 2007). In such a system, as education and socialization are seen as transinstitutional processes, five territorial agents contribute to an integrated and consensual development project: the local government/administration (which leads, plans and catalyzes efforts and interests), the families (who ensure the individuals' educational itinerary is not limited to their academic path), the citizens' associations (which enable direct connections to the city), the production system (offering rich and complex experiences to the territory) and the educative/training institutions (which transform life experience into cultural experience).

Having had the opportunity to communicate with several locally relevant entities within the research process that this paper refers to, for this particular discussion we will be using data resulting from our interactions with young people (between the ages of 5 and 17) who lived and/or studied in Massarelos. In 2010, we developed a series of six focus groups: one group of kindergarteners (ages 5–6), one group of 1st and 2nd graders (ages 6–8), one group of 3rd and 4th graders (≈8–10), two groups of 6th graders (≈11–12) and one group of 9th graders (≈14–17). The option for focus groups was made for two main reasons: first, the expected number of subjects required an adequately extensive and complex methodological approach; secondly, it was related to an understanding of their potential as instruments for participation. What truly distinguishes focus groups from other group data collection methods is the discussion aspect, namely what is generated by the interaction between individuals and the expression/confrontation of their ideas. "[…] There is always the potential for the focus group process itself to initiate changes in participants' thinking and understanding, merely through exposure to the interactive process" (Barbour 1999). At the community level, especially in the urban context, there are not many opportunities for discussion among peers about the experience of "living in the city", and that was what we expected to provide.

At the time this study took place, the Portuguese educational system was divided into non-compulsory (kindergarten and secondary school) and compulsory (all others) levels, the latter being grouped in cycles: the first cycle corresponding to the

first four years of compulsory education, the second cycle to the following two years, and the third cycle to the three years after that (a total of nine years of compulsory education, followed by an optional three more years of secondary education). To reduce bureaucratic concerns, and because the project was based on the Civil Parish Government (which had a close and positive institutional relationship with the local school group), the choice was made to limit the sample to young people studying within the local vertical school group (including schools of different levels).

After obtaining permission from the school group's direction and the students' legal guardians, and ensuring the anonymity of the participants, a more or less flexible script was designed. This document listed a series of issues to be discussed, and it was planned to help produce an understanding of the perceptions of young people who lived and/or studied in Massarelos about the educational potential of the territory they inhabited.

The focus groups were registered exclusively via audio recording. After transcribing and submitting the focus groups to a content analysis, it was possible to identify a few main consistencies. These can be seen as aspects of these young people's perceptions about this issue (their discourse) and of their appropriations (their projects), either past, present or future.

Being Young in the City: A Threefold Analysis

As was previously mentioned, a single script was designed and used for all six focus groups, covering fairly comprehensively the social and educational experiences about which we were hoping to gather the young people's views. Obviously, as it was a script and not an exhaustive list of questions, the actual structure of these six focus groups, (i.e. the way the questions were posed or how the discussion was stimulated) varied widely. This also meant structurally distinct content analysis grids for each focus group, with the underlying concern of identifying the aforementioned consistencies. Among the aspects/themes brought up during the focus group discussions were: what is a city, who makes the decisions about the city, how relevant is playing in the street, where in the city can one learn and what kind of learning takes place there, what rights and duties does one hold (and/or should hold) towards the city, what improvements would be relevant in the urban context and what could the several local agents do in terms of those improvements.

One of the dimensions emerging from the analysis is the reference to "The Physical City". It is the city of infrastructures: buildings, services, outdoor/green areas, places of commerce, monuments and large conglomerates of people and vehicles. It is also a place in relation with the world, with a set of traits that make "our" city different from some and similar to others. Concerns with the environment and sustainability also emerged from the discussion about "The Physical City", which are especially pressing amongst the younger participants. The city is also made of (re)claimed spaces: structures that do not exist yet, that are inaccessible or

subpar (in terms of what the young people want). The city was also discussed as a place of action: work, opportunities, events. It is ever mutating, as it reflects the history of the community and the passage of time. "The Physical City" can also be a grey city: the older participants, particularly, talk about the degradation and abandonment of urban spaces.

A second dimension of these young people's discourse about the city is what can be labeled as "The City of Rights and Duties". The participants perceive themselves as having feeble autonomy in terms of both their participation in the decision-making process and the usage/appropriation of spaces. They discussed the city as a space of possibility, but also a context of prohibition, establishing a set of dichotomies: a space of rules versus transgression; a concrete versus desired space; a space of action versus inaction. Civic and political participation (i.e. the opportunity to participate, as well as the limits and disadvantages of participating) are some of the concerns these participants express. Young people between the ages of 11–12 seem to be those who have greater confidence on the range of their action, but also seem more concerned with the responsibility that participation brings. Older intervenients convey a more cynical stance towards the limits of participation: they feel they have the right to an opinion, but they also feel there is a great probability that it may not be heard.

Finally, a third dimension pervaded in the analysis of these focus groups: "The City of Relationships". This discussion revolved around

- neighborhood networks (the relevance of knowing and interacting with one's neighbors),
- urban relationships from a historical point of view (how local history can help explain current interaction dynamics—or the lack thereof) and
- the city as a co-habited space and, therefore, a space subject to diverse, and eventually incompatible, styles of usage and appropriation.

Concerning "The City of Relationships", young people also discussed conviviality as a commitment (i.e. something that depends on one's ability to manage time and activities, but also on collective efforts to reduce risks associated with the urban experience).

Closing Remarks

For the purpose of this paper, we focused on some of the results obtained from the use of focus group discussions with young people, but the analysis of these individuals' perceptions and appropriations of the city is merely one aspect of the developed project. These findings support the notion that young people have, indeed, highly complex perceptions of the physical, acting, learning, experiential, relational and identitarian urban spaces. In reference to the concept of an Integrated Training System (Villar 2007), we find it worth mentioning how only the local

companies (the production system) were entirely absent from these participants' discourses and discussions about the city. This seems to validate, to an extent, the data gathered from the companies themselves, which point towards a meager implication in the local social-educational dynamics.

The data presented here has also supported our initial idea that mediation platforms/professionals could have a role in developing a series of initiatives to promote the young people's direct contact with the physical, historical, social, cultural and relational resources of the territory they inhabit, such as photographic wanderings, fairs, visits to local organizations and a more active engagement with the local government's activities.

In future research endeavors, we would like to further stimulate the debate about the role of young people in building (physically and figuratively) urban spaces which are more enabling of individual and community development, with special emphasis on non-formal and informal dynamics and formats.

Bibliography

Ascher, F. (2010). *Novos Princípios do Urbanismo, seguido de Novos Compromissos Urbanos*. Livros Horizonte: Um léxico. Lisboa.

Barbour, R. S. (1999). Are focus groups an appropriate tool for studying organizational change? In R. S. Barbour & J. Kitzinger (Eds.), *Developing focus group research. Politics, theory and practice* (pp. 113–126). USA: Sage.

Benevolo, L. (2006). *A Cidade e o Arquitecto*. Lisboa: Edições 70.

Borja, J., & Muxí, Z. (2003). *El Espacio Público: Ciudad y ciudadanía*. Barcelona: Diputació de Barcelona – Xarxa de Municipis/Electa.

Canadell, À., & Vicens, J. (2010). *Habitar la Ciudad*. Madrid: Miraguano Ediciones.

Gehl, J. (2010). *Cities for people*. Washington, Covelo, London: Island Press.

Lúcio, J. (2011). *A Mediação Sócio-Educativa na Construção da Cidade Educadora: O projeto "Massarelos, Freguesia Educadora"*. Edição do autor: Tese de Doutoramento em Ciências da Educação. Porto.

Lynch, K. (2007). *A Boa Forma da Cidade*. Lisboa: Edições 70.

Lynch, K. (2009). *A Imagem da Cidade*. Lisboa: Edições 70.

Roig, M. (2007). Barrios, Pueblos y Ciudades Educadoras: Los proyectos educativos de ciudad, un ejercicio de corresponsabilidad. In Á. Merino & J. Plana (Eds.), *La Ciudad Educa: Aportaciones para una política educativa local*. Barcelona: Ediciones del Serbal.

Sennett, R. (2002). *The fall of public man*. London: Penguin Books.

Villar, M. B. C. (2007). *A Cidade Educadora. Nova perspectiva de organização e intervenção municipal*. Lisboa: Instituto Piaget.

All-Day Schooling in Educational Networks

Vicki Täubig

Abstract The creation of educational networks and the more recent development of all-day schooling in Germany have happened simultaneously, and both developments are seen a reciprocal. This chapter traces the genesis of these from a neo-institutionalist perspective. The respective different socio-spatial locations of the two measures within district and municipality are a constitutive element. Multiplication is described in conjunction with standardization, which is demonstrated empirically in the assigning of municipal local authorities as the space of educational networks.

Keywords All-day schooling • Educational networks • Social space • Neo-institutionalism • Rationality myth • Isomorphism • Cooperation • Informal education

Educational networks and the recent all-day school structure in Germany have both emerged at the same time, and both developments are regarded as reciprocal (Durdel 2009; Eisnach 2011; Bollweg and Otto 2011; Coelen and Rother 2014). This chapter traces the genesis of these from a neo-institutional perspective. The respective different socio-spatial locations of the two measures are a constitutive element.

The Creation of Educational Networks and All-Day Schools

Educational networks as well as the more recent all-day school structure in Germany began with the first PISA study (German PISA Consortium 2001). Although the evidence regarding the connection between participation in education and social background in Germany was known before, the "PISA shock" had a new

V. Täubig (✉)
Faculty of Education, Architecture and Arts, Department of Educational Science and Psychology, University of Siegen, Adolf-Reichwein-Str. 2a, 57068 Siegen, Germany
e-mail: vicki.taeubig@uni-siegen.de

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impact on the public and education policy. Educational networks and all-day schooling have therefore been established as measures taken to counter, for example, inequality in education (Bollweg and Otto 2011; Kuhlmann 2012). In addition to this main motivation, further objectives are involved:
Objectives of educational networks (Bleckmann and Durdel 2009; Stolz 2008, 2012)

- Reduction of educational disadvantage
- Improved compatibility of family and career
- Education as a location factor for municipalities
- Dealing with demographic change (in particular the fall in the number of children and the increase in the proportion of families with a migration background)
- Reintegration of educationally disadvantaged young people
- Preservation of human capital
- Development of all-day schooling

Objectives of all-day schools (Rauschenbach et al. 2012; Stötzel and Wagener 2014)

- Equal opportunities and reduction in educational disparities respectively
- Improved compatibility of family and career
- Improved acquisition of specialist competencies
- Individual support for gifted and disadvantaged pupils
- Integration of pupils with a migration background
- Cooperation between schools and extracurricular actors

These separate lists indicate a great proximity, and to a certain extent even congruency, in the rationale for educational networks and all-day schools. In particular, the objectives that are focused on implementation prove the reciprocity of both developments: the objective of educational networks is the development of all-day schools, while all-day schools (are supposed to) achieve cooperation with extracurricular actors. In this initially convincing complementarity Rauschenbach et al. (2012, p. 19) critically represent a "difference in perspective as a type of mutual masking."[1] To exaggerate a little, the function of (all-day) schooling within the educational network is relevant from the point of view of educational networks; from the point of view of all-day schooling, however, the function of educational networks is relevant for (all-day) schooling.

It becomes clear here that there is a spatial (positional) relationship between all-day schooling and educational networks. Because all-day schools are arranged *into* educational networks, the latter seem to be the spatially larger unit. Assuming with Löw (2001) that spaces reach their limits where the synthesis of individual sub-components ends, it is clear that there is a different demarcation or location for educational networks and all-day schools: the space of the all-day school is the

[1]Own translation.

school building or, if the school opens out, the district (e.g. Baumheimer and Fortmann 2011), whereas educational networks are positioned across districts within regions or municipalities.

The more recent growth in all-day schooling started with the German government's investment programme "Future, Education and Support" ("Zukunft, Bildung und Betreuung", IZBB) which provided 4 billion euros for the organization and development of all-day schools, as well as undertaking accompanying research from 2003 to 2009 (BMBF 2014a).[2] It is predicted that there will be a system transformation: classical German half-day schooling will become all-day schooling, whereby the latter will be the norm (Kolbe et al. 2009). Since 2002 there has indeed been a continual increase in the number of all-day schools (Autorengruppe Bildunsgberichterstattung 2014). In 2012, depending on the type of school, *at least* every second school was able to demonstrate all-day schooling, and a third of all pupils were participating in this (Sekretariat der KMK 2014).

In contrast to the rapid implementation of the "All-day Schooling measure", "educational networks" first developed within education policy discourse. On the one hand, this takes up a new understanding of education that goes beyond the school and that is expressed by the triad of terms informal/non-formal/formal (Täubig 2009). On the other hand, educational networks, with their spatial positioning within regions or municipalities, are connected with regionalizing socio-political approaches—regarded as "government of social proximity" (Kessl and Otto 2007, p. 7; see Täubig 2013; on this see also Emmerich in this volume). In this sense, "regional", "municipal" or "local" are placed as an attribute before educational networks. In addition, the concept of education network is characterized by definitional ambiguity and conceptional openness (Mack 2008).

The genesis of educational networks can be easily traced—in accordance with its discursive character—through documentation. The following documents, in chronological order, represent milestones:

- the resolutions by the Youth Minister Conference and Culture Minister Conference on schools and youth welfare working together for the "strengthening and further development of the whole context of education, upbringing and support" (JMK and KMK 2004),
- the Twelfth Children's and Youth Report by the German government (Zwölfter Kinder- und Jugendbericht der Bundesregierung) with its concept of "education before and alongside school" (Deutscher Bundestag 2005),
- the Aachen Declaration of the German Association of Cities and Towns (die Aachener Erklärung des Deutschen Städtetages), which states, the "principle of the towns'engagement is the municipal educational network" (2007, p. 2),

[2]The formulation "more recent" development in all-day schooling is intended to indicate that all-day schools are not a 21st century invention in Germany either, that there certainly are traditions of reform pedagogy, and that a few all-day schools did exist before the development began in 2003 (Ludwig 2005).

- the discussion paper of the German Association for Public and Private Welfare (Deutscher Verein für öffentliche und private Fürsorge), which demands "consistent orientation towards the image of a municipal educational network" (2007, p. 3) as well as
- the funding directives of the programme "On-Site Learning" ("Lernen vor Ort"), devised by the German government and German foundations, aim to "encourage districts and towns without districts to (further) develop municipal education management by calling for proposals" (BMBF 2008, p. 4).

The new understanding of education is institutionally demonstrated by the fact that, above all, child and youth welfare appears, or is addressed, as an educational actor alongside school (Rauschenbach and Otto 2008). The municipalities demand their place in education policy in terms of the regionalization of education. The latter in particular is taken up by the programme "On-Site Learning". Here, municipal local authorities are invited to apply for subsidies. The programme is supporting 36 sites with 60 million euros nationally from 2009 to 2014 (BMBF 2014b, c). The provision of these subsidies marks the transition from the discursive term "educational networks" to the course of action. The following sections will explore the resource-relevant discourses.

Neo-institutionalist Considerations

The titles of the two texts that are considered *the* central, fundamental texts of neo-institutionalism—"Institutionalized Organizations. Formal Structure as Myth and Ceremony" (Meyer and Rowan 1991) and "The iron cage revisited. Institutional isomorphism and collective rationality in organizational fields" (DiMaggio and Powell 1991)—already indicate the usefulness of neo-institutionalist theory in the exploration of educational networks. Not only individual organizations are investigated, but also organizational fields which—like educational networks—consist of several organizations and their consumers or addressees. The question of the borderline of such an organizational field can be answered as an empirical question. Moreover, the founders of neo-institutionalism addressed the field of education very early on (Meyer 1977).

Rationality Myths Securing Success

The concepts of institution, institutionalization, myth and collective rationality testify to the basic idea of collective bodies of knowledge that develop out of institutionalization (Berger and Luckmann 2012). Neo-institutionalism is concerned with rationalized, institutionalized rules or myths that involve "rationality as institutionalized expectation" (Koch 2009, p. 114). These "rationality myths"

(Walgenbach 2006, p. 359) identify socially legitimate aims and means to achieve these objectives. They secure the success of organizations and, ultimately, organizational survival.

In Fig. 1 the figure of organizational survival (Meyer and Rowan 1991) has been transferred onto the organizational creation of the all-day schooling and educational networks measures. It includes the objective and means involved in all-day schools and educational networks as rationality myths. As already detailed, the central rationale for both measures is the objective of reducing educational inequality due to the pupil's background. The means by which this objective is achieved is, for the all-day school, cooperation within the district; for the educational network it is being networked within the municipality.[3] Rationality *myths* are the objective and the means because their correctness and rationality is believed. They simply cannot be questioned. Who would doubt the objective of reducing educational inequality, or object to the means to this objective: cooperation within the district and being networked within the municipality? Rationality myths shape the organizations or organizational fields. In accordance with the myths, organizations designated all-day schools cooperate within their district, and "educational networks" are networked within the municipality. Both, of course, have the objective of reducing educational inequality. The myths resonate within these designations. They are characteristics of these formal organizations, and these are consistent above and beyond any all-day schools and educational networks respectively. Setting up

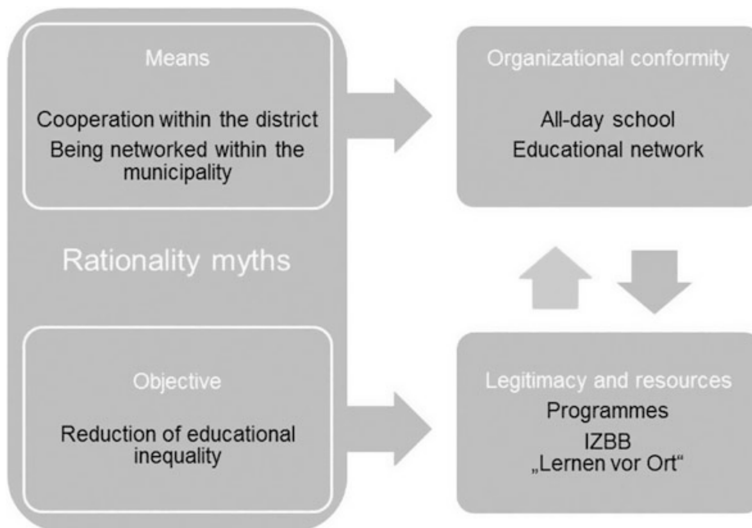

Fig. 1 Organizational creation of all-day schooling and educational networks (*Source* Own representation)

[3]Stolz et al. (2011) similarly write about the "myth of networked education" (own translation).

organizations or an organizational field as an all-day school or educational network confers a high level of social legitimacy. This is not only apparent in the financial resources made available. Examples of this are the "IZBB" programme ("Future, Education and Support") for all-day schooling and the programme "Lernen vor Ort" ("On-Site Learning") for educational networks. Resources in turn have an effect on the formal structures of organizations because the organizations adapt to the requirements of the programmes. Ultimately, the financial reward of organizational conformity reinforces processes of homogenization.

Isomorphism: Multiplication and Standardization

These processes of homogenization are described in neo-institutionalism as isomorphism (DiMaggio and Powell 1983). Three forms of isomorphism are distinguished. Mimetic isomorphism reacts to uncertainty or problems with unclear causes, and it means imitating other "successful" organizations. Normative isomorphism is based on processes of professionalization. Coercive isomorphism encompasses governmental requirements such as directives and laws.

It is possible to trace individual forms of isomorphism for both educational networks and all-day schooling. Their common beginning in the PISA shock means educational networks and all-day schools per se were the reactions of insecure organizations and policy respectively to the PISA shock. All-day schooling in other countries is seen as the decisive factor in producing a successful performance in the PISA study, and it is therefore imitated. This involves assimilating to an international standard (Allemann-Ghionda 2009). It is clear that educational networks, independent of the very heterogenous starting points of individual regions, involve isomorphic formal structures. Education offices and regional educational mentoring are being set up everywhere. Multi-professional teamwork is cited as a requirement for all-day schools and educational networks (Coelen 2009; Speck et al. 2011); social work features cooperation as a type of basic professional attitude (for a critical approach to this see Kessel 2011). Governmental requirements, of which the national support programmes are a part, necessitate assimilations. All-day schools and educational networks are shaped by the laws of individual German states.

Empirical results show clearly that, for the spatial demarcation of educational networks, the multiplication of educational networks is accompanied by their standardization (Täubig 2013). If at one time the attribute "local" before "educational network" was intended to be conceptually open to different spatial demarcations of the respective educational networks (Täubig 2011), in the meantime there has been a delineation of the discourse and therefore of the shape of educational networks. The prerequisites for subsidies and legal requirements demarcate educational networks with the help of the municipal local authorities, necessitating standardized spatial expansions of educational networks on the basis of their resource relevance.

Conclusion

From the neo-institutionalist point of view, the genesis of educational networks and all-day schooling are success stories. They are increasingly taking shape, legitimized as successful organizations. Starting from the PISA shock, tracing the creation of educational networks and all-day schooling demonstrates the constitutive spatial relation in these success stories. In so doing, a distinction must be made between a spatial arrangement of all-day schooling within the district and a spatial arrangement of educational networks within the municipality.

A shape for all-day schools and a clarity around what all-day schools are, or rather what is supported as an all-day school, have been achieved sooner mainly because the discourse "all-day school" was immediately underpinned by resources. Educational networks, however, have existed for a long time in the shadows of education policy discourse. Now, with the later announcement of support programmes—in comparison with all-day schooling—educational networks are, belatedly, taking shape and becoming disambiguated. In formal-structural shaping it is the space-related rationality myths of the discourse that take the lead, narrowing into coercive isomorphisms upon resource allocation.

Bibliography

Allemann-Ghionda, C. (2009). Ganztagsschule im europäischen Vergleich. Zeitpolitiken modernisieren – durch Vergleich Standards setzen? In L. Stecher, C. Allemann-Ghionda, W. Helsper & E. Klieme (Eds.), *Zeitschrift für Pädagogik 54. Beiheft Ganztägige Bildung und Betreuung* (pp. 190–208).

Autorengruppe Bildungsberichterstattung. (2014). *Bildung in Deutschland 2014. Ein indikatorengestützter Bericht mit einer Analyse zur Bildung von Menschen mit Behinderungen*. Bielefeld: Bertelsmann.

Baumheier, U., & Fortmann, C. (2011). Ganztagsschulen in Bildungs- und Integrationsnetzwerken im Stadtteil. In K. Speck, T. Olk, O. Böhm-Kasper, H.-J. Stolz, & C. Wiezorek (Eds.), *Ganztagsschulische Kooperation und Professionsentwicklung. Studien zu multiprofessionellen Teams und sozialräumlicher Vernetzung* (pp. 170–181). Weinheim, Munich: Juventa.

Berger, P. L., & Luckmann, T. (2012). *Die gesellschaftliche Konstruktion der Wirklichkeit. Eine Theorie der Wissenssoziologie* (24th ed.). Frankfurt a. M.: Fischer-Taschenbuch.

Bleckmann, P., & Durdel, A. (2009). Einführung: Lokale Bildungslandschaften – die zweifache Öffnung. In. P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 11–16). Wiesbaden: VS.

BMBF—Bundesministerium für Bildung und Forschung. (2008). *Bekanntmachung von Förderrichtlinien für das Programm "Lernen vor Ort"*. http://www.lernen-vor-ort.info/_media/BMBF_Foerderrichtlinien_lvo_final.pdf. Accessed April 22, 2014.

BMBF—Bundesministerium für Bildung und Forschung. (2014a). *Ganztagsschule braucht individuelle Lernzeiten*. http://www.bmbf.de/de/1125.php. Accessed April 22, 2014.

BMBF—Bundesministerium für Bildung und Forschung. (2014b). *Programmhintergrund*. http://www.lernen-vor-ort.info/de/98.php. Accessed April 22, 2014.

BMBF—Bundesministerium für Bildung und Forschung. (2014c). *Teilnehmende Kommunen*. http://www.lernen-vor-ort.info/de/268.php. Accessed April 22, 2014.

Bollweg, P., & Otto, H.-U. (2011). Bildungslandschaft: Zur subjektorientierten Nutzung und topologischen Ausgestaltung. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 13–35). Wiesbaden: VS.

Coelen, T. (2009). Ganztagsbildung im Rahmen einer Kommunalen Kinder- und Jugendbildung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 89–104). Wiesbaden: VS.

Coelen, T., & Rother, P. (2014). Ganztagsschulen in Bildungslandschaften. In T. Coelen & L. Stecher (Eds.), *Die Ganztagsschule. Eine Einführung* (pp. 79–96). Weinheim, Basel: Beltz Juventa.

Deutscher Bundestag (Ed.). (2005). *Bericht über die Lebenssituation junger Menschen und die Leistungen der Kinder- und Jugendhilfe in Deutschland. Zwölfter Kinder- und Jugendbericht.* Berlin: Bundestagsdrucksache 15/6014.

Deutscher Städtetag. (2007). *Aachener Erklärung des Deutschen Städtetages anlässlich des Kongresses "Bildung in der Stadt" am 22./23. November 2007*. http://www.trier.de/File/Aachener-Erklaerung-pdf/. Accessed April 22, 2014.

Deutscher Verein für öffentliche und private Fürsorge e. V. (2007). *Diskussionspapier des Deutschen Vereins zum Aufbau Kommunaler Bildungslandschaften*. http://www.deutscher-verein.de/05-empfehlungen/empfehlungen_archiv/empfehlungen2007/pdf/Diskussionspapier_des_Deutschen_Vereins_zum_Aufbau_Kommunaler_Bildungslandschaften.pdf. Accessed April 22, 2014.

Deutsches PISA-Konsortium. (2001). *PISA 2000. Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich*. Leske and Budrich: Opladen.

DiMaggio, P. J., & Powell, W. W. (1991). The iron cage revisited. Institutional isomorphism and collective rationality in organizational fields. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 63–82). Chicago, London: University of Chicago Press.

Durdel, A. (2009). Ganztagsschulen als Teil von Bildungslandschaften. Zwischen Bereicherung und Überforderung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 121–133). Wiesbaden: VS.

Eisnach, K. (2011). *Ganztagsschulentwicklung in einer kommunalen Bildungslandschaft. Möglichkeiten und Grenzen von Unterstützungsstrukturen*. Wiesbaden: VS.

JMK—Jugendministerkonferenz & KMK—Kultusministerkonferenz. (2004). *Zusammenarbeit von Schule und Jugendhilfe zur* "*Stärkung und Weiterentwicklung des Gesamtzusammenhangs von Bildung, Erziehung und Betreuung*". Beschluss der Jugendministerkonferenz vom 13./14.05.2004/Beschluss der Kultusministerkonferenz vom 03./04.06.2004. http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_06_04_Zusammenarbeit_Schule_Jugendhilfe.pdf. Accessed April 22, 2014.

Kessl, F. (2011). Von der Omnipräsenz der Kooperationsforderung in der Sozialen Arbeit. *Eine Problematisierung. Zeitschrift für Sozialpädagogik, 9*(4), 405–415.

Kessl, F., & Otto, H.-U. (2007). Von der (Re-)Territorialisierung des Sozialen. Zur Regierung sozialer Nahräume – eine Einleitung. In F. Kessl & H.-U. Otto (Eds.), *Territorialisierung des Sozialen. Regieren über soziale Nahräume* (pp. 7–21). Opladen: Leske and Budrich.

Koch, S. (2009). Die Bausteine neo-institutionalistischer Organisationstheorie – Begriffe und Konzepte im Laufe der Zeit. In S. Koch & M. Schemmann (Eds.), *Neoinstitutionalismus in der Erziehungswissenschaft. Grundlegende Texte und empirische Studien* (pp. 110–131). Wiesbaden: VS.

Kolbe, F.-U., Reh, S., Idel, T.-S., Fritzsche, B., & Rabenstein, K. (2009). Ganztagsschule als symbolische Konstruktion – Analysen und Falldarstellungen aus schultheoretischer Perspektive. Zur Einleitung. In F.-U. Kolbe, S. Reh, T.-S. Idel, B. Fritzsche, & K. Rabenstein (Eds.), *Ganztagsschule als symbolische Konstruktion* (pp. 11–20). Wiesbaden: VS.

Kuhlmann, C. (2012). *Bildungspolitik und Leistungsvergleichsstudien. PISA 2000 und die Ganztagsschulentwicklung*. Wiesbaden: VS.

Löw, M. (2001). *Raumsoziologie*. Frankfurt a. M: Suhrkamp.

Ludwig, H. (2005). Ganztagsschule und Reformpädagogik. In T. Hansel (Ed.), *Ganztagsschule. Halbe Sache - Großer Wurf? Schulpädagogische Betrachtung eines bildungspolitischen Investitionsprogramms* (pp. 33–53). Herbolzheim: Centaurus-Verlag.

Mack, W. (2008). Bildungslandschaften. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung* (pp. 741–749). Wiesbaden: VS.

Meyer, J. W. (1977). The effects of education as an institution. *American Journal of Sociology, 83*, 55–77.

Meyer, J. W., & Rowan, B. (1991). Institutionalized organisations. Formal structure as myth and ceremony. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 41–62). Chicago, London: University of Chicago Press.

Rauschenbach, T., Arnoldt, B., Steiner, C., & Stolz, H.-J. (2012). *Ganztagsschule als Hoffnungsträger für die Zukunft? Ein Reformprojekt auf dem Prüfstand*. Gütersloh: Bertelsmann.

Rauschenbach, T., & Otto, H.-U. (2008). Die neue Bildungsdebatte. Chance oder Risiko für die Kinder- und Jugendhilfe? In T. Rauschenbach & H.-U. Otto (Eds.), *Die andere Seite der Bildung* (2nd ed., pp. 9–29). Wiesbaden: VS.

Sekretariat der KMK. (2014). *Allgemein bildende Schulen in Ganztagsform in den Ländern in der Bundesrepublik Deutschland – Statistik 2008 bis 2012*. http://www.kmk.org/fileadmin/pdf/Statistik/Dokumentationen/GTS_2012_Bericht.pdf. Accessed April 22, 2014.

Speck, K., Olk, T., & Stimpel, T. (2011). Auf dem Weg zu multiprofessionellen Organisationen? Die Kooperation von Sozialpädagogen und Lehrkräften im schulischen Ganztag. Empirische Befunde aus der Ganztagsforschung und dem Forschungsprojekt “Professionelle Kooperation von unterschiedlichen Berufskulturen an Ganztagsschulen” (ProKoop). In W. Helsper & R. Tippelt (Eds.), *Zeitschrift für Pädagogik 57. Beiheft Pädagogische Professionalität* (pp. 184–201).

Stötzel, J., & Wagener, A. L. (2014). Historische Entwicklungen und Zielsetzungen von Ganztagsschulen in Deutschland. In T. Coelen & L. Stecher (Eds.), *Die Ganztagsschule. Eine Einführung* (pp. 49–64). Weinheim, Basel: Beltz Juventa.

Stolz, H.-J. (2008). Ganztagsbildung im lokalen Raum. Perspektiven der Kinder- und Jugendhilfe. *Die Deutsche Schule, 3*, 281–288.

Stolz, H.-J. (2012). Bildung neu denken! Kritische Anmerkungen zu aktuellen Ansätzen lokaler Bildungslandschaften und mögliche Alternativen. In P. Bleckmann & V. Schmidt (Eds.), *Bildungslandschaften. Mehr Chancen für alle* (pp. 21–31). Wiesbaden: VS.

Stolz, H.-J., Schalkhaußer, S., & Täubig, V. (2011). “Vernetzte Bildung” – Ein institutioneller Mythos? In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 99–111). Wiesbaden: VS.

Täubig, V. (2009). Ganztagsschule und Jugendhilfe in “lokalen Bildungslandschaften”. *Unsere Jugend 7 + 8*, 303–308.

Täubig, V. (2011). Lokale Bildungslandschaften – Governance zwischen Schule und Jugendhilfe zum Abbau herkunftsbedingter Bildungsungleichheit? In F. Dietrich, M. Heinrich, & N. Thieme (Eds.), *Neue Steuerung – alte Ungleichheiten? Steuerung und Entwicklung im Bildungssystem* (pp. 219–228). Münster: Waxmann.

Täubig, V. (2013). Etabliert und vereinheitlicht? Neo-institutionalistische Überlegungen zu Bildungslandschaften und ihrer Erforschung. *Zeitschrift für Sozialpädagogik, 1*, 4–17.

Walgenbach, P. (2006). Institutionalistische Ansätze in der Organisationstheorie. In A. Kieser (Ed.), *Organisationstheorien* (5th ed., pp. 353–402). Stuttgart: Kohlhammer.

Educational Politics and Urban Design for Learning. Local Educational Landscapes in Policy and Practice

Angela Million, Thomas Coelen, Anna Juliane Heinrich, Christine Loth and Ivanka Somborski

Abstract There is a rising interest of urban planners and designers in the field of education, while in the field of education social-spatial settings are acknowledged as places for learning. Thus the implementation of "educational landscapes" is of interest to both groups of actors. The chapter presents intermediate results of an interdisciplinary research project combining spatial planning, urban design and architecture, educational and social sciences on how educational policy and local educational practitioners affect urban development and vice versa. The project investigates the design of socio-spatial educational landscapes by several case studies. Shared topics and themes in educational and urban development policy on the federal, state and inter-municipal scale can be found for example in their focus on deprived neighborhoods, on children and youth, and on schools, while life-long learning and informal settings of learning are neglected. In some places the 'new' idea of educational landscapes results in the design of a centrally located campus for learning.

A. Million (✉) · A.J. Heinrich
Department of Urban and Regional Planning (ISR), Urban Design and Urban Development, Technische Universität Berlin/TU Berlin, Hardenbergstr. 40A, 10623 Berlin, Germany
e-mail: angela.million@isr.tu-berlin.de

A.J. Heinrich
e-mail: juliane.heinrich@isr.tu-berlin.de

T. Coelen · I. Somborski
Department of Educational Science and Psychology, Faculty of Education, Architecture and Arts, University of Siegen, Adolf-Reichwein-Straße 2a, 57068 Siegen, Germany
e-mail: thomas.coelen@uni-siegen.de

I. Somborski
e-mail: ivanka.somborski@uni-siegen.de

C. Loth
Department of Architecture and Department of Education and Psychology, Faculty of Education,Architecture and Arts, University of Siegen, Paul-Bonatz Straße 9-11, 57068 Siegen, Germany
e-mail: loth@architektur.uni-siegen.de

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Academic and increasingly also political debates on urban development and education policy (Bleckmann and Schmidt 2012; BMFSFJ 2005; BMVBS 2012; Coelen et al. 2016; Million et al. 2015a) are ascertaining the significance of the conceptual and spatial design of so called educational landscapes (Germ. "*Bildungslandschaft*", also known as "*Bildungsverbund*", i.e. "Educational Alliance") in the context of neighbourhood development. Across Germany, policymakers in cities and towns are working to implement educational landscapes practically and are searching for integrated approaches to public education services, youth and child welfare, urban planning and design. In this context, we understand urban development as policies, strategies and projects to plan and to develop cities and regions, city districts and neighbourhoods.

From 2014 to 2016 we have been researching into the interfaces and interconnections between education and urban development in a research project funded by the German Research Foundation (DFG). At TU Berlin's Institute for Urban and Regional Planning (ISR) and the Siegen Centre for Socio-Scientific Educational Research (SiZe), the project "Local Educational Landscapes and Urban Development—Interfaces and Interlacings" systematically identifies conceptual and practical points of contact with regard to the content and spatial aspects of the education system and urban development on different scales.

In an interdisciplinary team of researchers from the fields of regional and spatial planning, architecture, educational and social sciences, we are analysing how educational policy and local educational practitioners try to affect urban development and planning and vice versa. At the same time, we are looking into the potential and limits of integrating the two areas and investigating the physical design of educational landscapes by case studies. The chapter presents key results, by following the logic of the two parts of the study: (1) exploring shared topics and themes in educational policy and urban development policy on the federal, state and inter-municipal level and (2) exploring local educational landscapes as social and built spaces in cities and communities.

Educational Landscapes

In the discussion within German national educational policy, research, and theory on the increasingly municipal nature of education, the term "*Bildungslandschaft*", i.e. "educational landscape" (also known as "*Bildungsverbund*", i.e. "educational alliance"), has become a new key term (cf. Mack 2008). Educational landscapes are

long-term cooperative ventures by various formal and non-formal institutions involved in child raising, child care and education on a regional, municipal or local level (cf. Bleckmann and Durdel 2009; Deutscher Städtetag 2007; Deutscher Verein 2007). The key institutions are often (all-day) schools (cf. Edelhoff and Uttke 2010). Over the past few years, various programs and studies have played a role in creating and analysing various educational landscapes in Germany, such as studies by the Federal Ministry of Education and Research (BMBF), the German Children and Youth Foundation (DKJS) and the German Youth Institute (DJI). For example, the great interest aroused by the On-Site Learning initiative, run by the Federal Ministry of Education and Research (2009–2012), can be seen as a sign of the increasing importance of educational landscapes.

Across Germany, the term "educational landscape" covers a very wide range of elements in practice. Berse (2009) identifies different types of educational landscape based on certain criteria: the definitions of "space" and "education" they are based on; the actors involved; the real-life significance of the cooperation between the youth welfare services and schools, and the management practices applied. Consequently, the author developed a typology used to distinguish between the four fundamental concepts behind educational landscapes (ibid., pp. 198–207):

- Type 1: Cooperation between the youth welfare services and schools
- Type 2: Schools and school development
- Type 3: Lifelong learning, continuing education, business-related learning
- Type 4: Social spaces as a places of learning

In terms of connections and interplay between the fields of action of education policy and urban development, Type 4 seems especially productive. In educational landscapes of this type "education policy networking is based on social spaces as educational locations", and "shaping the living conditions of social spaces" is seen as "foundation for educational processes" (ibid., p. 202). It involves urban development as a related and shaping element to municipal educational planning (cf. Deutscher Verein 2007). Reasons for that are the increasing concentration of urban development planning on the already built city; the growing focus on the neighbourhood as a central field of action in urban development; the growing orientation and changing understanding of educational planning and urban planning and design towards social spaces, coupled with the rising significance of cooperation in education, planning, and management.

Examples of educational landscapes with this kind of relationship to social spaces can be found in the following federal and regional programs and projects:

- the urban development funding program "City districts with special development needs—Social City", by the Federal Ministry of Transport, Building and Urban Development (BMVBS), since 1999,
- the BMVBS model project on national urban development policy (2008–2009),

- the DJI projects “Local educational landscapes in cooperation between all-day-schools and the youth welfare services (2007–2010) and “Local educational landscapes in cooperation between the youth welfare services and schools” (2008–2010),
- the DKJS and Jacobs Foundation program “Schools as a lifeworld—linking local actors and resources for individual child advancement” (2008–2010),
- the BMBF funding program “On-Site Learning” (2009–2012).

As there are about 400 educational landscapes right now implemented in Germany, only about two dozen of them work actively on shaping social spaces as places for learning.

Research Question and Research Design

The central question behind our research is: Where do the topics and spaces occupied by education and urban development meet and interconnect? This research question will be dealt by zooming in: from the federal, state and municipal policy level to the built space of local educational landscapes (see Fig. 1).

In part A of the study the policy cycle (Blum and Schubert 2011, pp. 15f., 51f. based on Löbler 1990; Schneider and Janning 2006, pp. 32, 48) is used as an overall heuristic concept to reconstruct how policies on education and urban development are sectorally interlinked in the analytical dimensions of (a) topics and subjects of discussion, (b) defining problems and agenda-setting, (c) determining programs and policy and (d) implementation and management.

The central focus is on a detailed discussion of common topics, shared or overlapping perceptions of problems, aims, programs, and implementation strategies at the point where education policy and urban development policy meet. They are explored on the federal, state and inter-municipal scales by analysing the content (Westle 2009, pp. 334ff.; Mayring and Gläser-Zikuda 2008) of relevant (e.g. political) documents and interviews with experts. On federal and state level these are the Federal Ministry for the Environment, Nature Conservation, Building

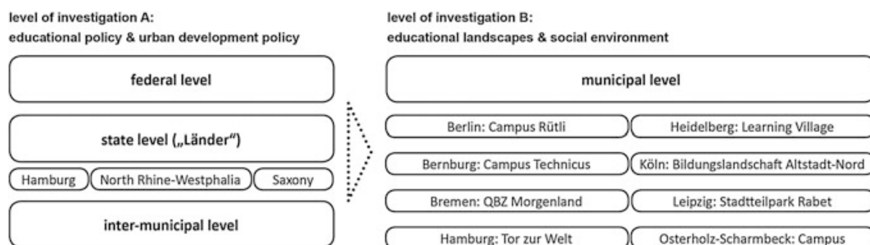

Fig. 1 Research design of the project “Local Educational Landscapes and Urban Development—Interfaces and Interlacings” (*Source* TU Berlin/University of Siegen)

and Nuclear Safety (BMUB), the Federal Ministry for Education and Research (BMBF) and the Federal Ministry for Family, Elderly, Women and Youth (BMFSFJ), pertinent state ministries in the three German States Hamburg, North Rhine-Westphalia and Saxony. The leading inter-municipal organizations representing cities and towns on federal and state level are the Association of German Cities (DST) and the German Association of Towns and Municipalities (DStGB). Expert interviews with and documents of these associations where analysed to study the inter-municipal policies.

The part B of the research project looks into the question of how the content and spaces of educational landscapes are defined and used as educational setting and for urban development. Within the study this research part received our main attention, since here—at the local level—educational processes are happening and policies and plans become actions and architecture. Focal points are educational landscapes in which social spaces are conceptualised as places for learning. The decisive factor when choosing case studies for theoretical sampling was a concrete link between educational landscapes and social spaces. In other words, educational landscapes were only chosen for our investigation if their program and implementation develop (or will develop) a direct effect on spaces through changes to the neighbourhood in terms of construction/space, design or other aspects. As such the production of the educational landscape as social practice and as background and environment for learning the built environment is studied. Eight case studies are selected which can be labelled as national forerunners: Some of them still being in the process of (design) planning or under construction (Berlin, Bremen, Heidelberg, Cologne), others fully built (Bernburg, Hamburg, Leipzig, Osterholz-Scharmbeck).

For the analysis, study trips were taken to the eight sites, guided expert interviews (Meuser and Nagel 2010) were held with central actors and extensive spatial analyses (Reicher 2012; Curdes 1997) were carried out. The main categories used to assess each educational landscape are their spatial structure, hard and soft infrastructure, open space and built character. The spatialities of the educational landscapes in their cities, towns or neighbourhoods (depending on urban context for each educational landscape) were analysed and mapped (Uttke 2009, p. 233), such as key spatial elements (e.g. typologies, urban grit, landmarks), public spaces (e.g. street scape, squares, green infrastructure), land use and their mix (e.g. educational, public institutions, residential areas, commerce etc.), natural landscape features (e.g. water ways, topography), traffic infrastructure (e.g. public transport, cycle and pedestrian routes), socio-demographic and socio-economic characteristics and spatial atmosphere (Böhme 2006, pp. 126–139; Hasse 2012, 2015). In combination with the interviews of actors and their motives and aims, the case studies allowed us to understand how educational and urban development aims and objectives are translated into the built environment and what desires and expectations actors have implementing educational landscapes.

When Educational Policy Meets Urban Development Policy

Our investigation of the interplay between educational policy and urban development policy on federal and state level showed a wide range of shared and overlapping subjects and lines of discussions. First there are general themes of todays' challenges in the (German) development of education and cities such as rising need for public participation and the on-going demographic development of growing and shrinking cities, towns and regions. Also named by the interviewed administrators were demands for better integration (but not as much stressed as it would be after the numbers of refugees since 2015). Four intersecting topics can be named which are heading the list of common themes of education policy and urban development policy on federal and state level:

- socially disadvantaged neighbourhoods,
- children and young people,
- quality of neighbourhoods and peoples educational biographies,
- school programs and school construction.

In both areas of policy, these intersecting topics are spanning more or less across different levels and crossing borders on a federal, state and inter-municipal scale. The general normative tenor of all political institutions surveyed was that the fields of discussion and practice around education and urban development are already seen as being principally integrated and linked. However, deeper analysis of the empirical material studying the dimensions of defining problems/agenda-setting, formulated programs and policies, and their implementation and management, explicitly indicates some clear programmatic and spatial focuses while others are neglected.

Focus on Socially Disadvantaged Neighbourhoods

A central topic at administrative level of federal and state policies in education and urban development are socially disadvantaged neighbourhoods. Policy on education and urban development links such living environments to long-term negative consequences both for individuals (e.g. failed educational biography, hindering peoples professional integration, resulting in social exclusion) and for the city's social structure (e.g. processes of segregation and polarisation within social spaces, tendencies for social inequality to be spatially determined). In both fields of policy deprived neighbourhoods create a great deal of pressure to take action. Socially disadvantaged neighbourhoods are therefore prioritised by federal and state strategies and funding programs, while other parts cities, town and regions are hardly targeted.

Focus on Children and Young People

Children and young people are the primary target group where education meets urban development policy (see also Million et al. 2015b). Special attention is paid to adolescents in socially disadvantaged urban neighbourhoods, as these neighbourhoods are associated with living and growing up in disadvantageous conditions. Although the concept of lifelong-learning is recognised as key target within education policy, adults or even older people play only a marginal role as age groups at points where education and urban development intersect.

Focus on Qualities in Neighbourhoods and Peoples Educational Biographies

Public investments from federal or state policy programs are mostly made in the quality of local educational programs, institutions and infrastructure in deprived neighbourhoods. Policymakers and administrators in education and urban development see investments in the local educational infrastructure as a way to foster successful educational biographies of children and young people from socially disadvantaged urban neighbourhoods. The central idea by the policy stakeholders is that individual opportunities for education and participation should not depend on the neighbourhood where people live and grow up. The improvement of local educational institutions and programs is linked to the aim of achieving greater educational equality. They further connect these actions to aims like minimising existing disparities between neighbourhoods, or achieve social stabilisation within a city or district. Policy programs thus clearly present the funding priority of deprived neighbourhoods as a vehicle for promotion social spatial approaches in education and achieving a positive neighbourhood development in the long term. The scale of neighbourhoods and city districts has been chosen as territorial access to deal with today’s socio-political challenges in education and urban development.

Focus on Schools

Although there can be found a wide variety of educational institutions in urban neighbourhoods, the focus of federal and state policy are schools as formal settings for learning including the construction and refurbishment of school buildings. Schools are the starting points for national and federal strategies aimed at improving the quality of local educational institutions and programs.

Also educational landscapes often start out, before anything else, with the establishment of all-day schools (*Ganztagsschulen*) cooperating with various, usually non-formal educational opportunities and institutions (e.g. youth clubs). Yet

the urban development policy addresses the design of public space and green infrastructure, but it does not recognise its role as spaces for informal learning.

Though policies on education and urban development share common themes and objectives with regard to these described focuses (achieving educational equality, improving the profile of disadvantaged urban neighbourhoods, etc.), policymakers and administrators in education and urban development on federal and state scales work quite independently of one another. There is little coordination of federal and state funding or support program. It must be assumed that, in the context of shaping local educational landscapes, interdepartmental cooperation between education and urban development is more likely to be found at the municipal scale.

Educational Landscapes as Social and Built Space

The case studies allowed us a better understanding and description of educational landscapes, the reasoning of actors behind them and the shaping physical elements of them. The in-depth analysis of the individual educational landscapes and the case comparison show that the definition given by Berse (2009) and resulting criteria for theoretical sampling provide only an abstract, vague description of *educational landscapes as social spaces* as a subject of investigation. The extensive and detailed empirical knowledge was thus used to reconstruct the constitutive elements of socio-spatial educational landscapes, and thus to make the subject of investigation more concrete, allowing it to be understood better.

Elements of Socio-Spatial Educational Landscapes

Based on the problem statement, agenda-setting, backgrounds, motivations, implementation process including methods and instruments, resources and support, and the political context we conclude that socio-spatial educational landscapes are undergoing a highly complex process of creation. They are largely stimulated and driven by particular sets of problems, innovative approaches and exceptional structures of funding and support. At the end it demonstrates connectivity in bringing activities and institutions together, rather than isolated objects and separate functions, in structured cooperation between different partners under the roof of an agenda (mostly labelled with a logo or slogan), and with an overall concept, that incorporates and pedagogical and spatial understanding.

- *Spatial connectivity*: one trait shared by the educational landscapes is that they are conceived as components of the city. As such they both link in with the spatial context and have a specific character in terms of urban development and architecture (e.g. the educational landscape's spatial connections, its character in

terms of urban development and architecture, the history of the area, the biography of the location, characterisation of the area including its potential, problems, change).

- *Cooperation structures*: the educational landscapes share the feature that the institutions involved see themselves as partners and develop structures within which they can work together (Categories investigated include the legal form and management of the educational landscape, written agreements on cooperation, financing, shared point of reference, such as a label).
- *Institutional partners*: the educational landscapes share the feature that different institutions are involved which look for an institutional connectivity (Categories investigated include early years education, education at all-day schools, adult education, work with children and youths, cultural education, public or municipal maintaining bodies, independent sponsors from civil society, sponsors under association law or private, commercial sponsors).
- *Overall concept—pedagogical and spatial aspects of the educational landscape*: the educational landscapes share the feature that they have an overall concept containing both pedagogical and spatial aspects equally (Categories investigated include characterisation of the educational landscape, overall concept in the form of a mission statement or similar, pedagogical concept and pedagogical aims, spatial/design concept and targets related to urban development, conflicting targets).

The Built Form of Socio-Spatial Educational Landscapes

In connection with the interviews, the spatial analyses show that there are three central subjects which are significant to the design of the eight socio-spatial educational landscapes: centrality or centralisation, connectivity between the educational landscape and the surrounding neighbourhood and duality of spatially closed and opened up spaces for learning.

- *Centrality or centralisation*: all eight educational landscapes are based on the assumption that the spatial proximity of the educational institutions and settings, and the coordination of their programs, have positive effects on the form and successful outcome of people's educational biographies. Accordingly, the projects either use an existing location of spatial and functional centrality to implement an educational landscape, or an educational landscape is created through a process of centralisation—both include the relocation of existing educational institutions (see Fig. 2). Often the design of a campus is used, characterised by an overall plan over individual buildings and open spaces. Through shaping educational landscapes as places of centrality they gain a high

level of importance within urban development. Its impact depends on the size of the municipality. The results of urban analyses show that—compared to the context—educational landscapes are rather big development projects (see Fig. 3). Designed as a campus they have often an introverted character with fences, parking-lots and by turned back of buildings to the neighbourhood. The campus design can be questioned about its benefits for accessibility and transitional processes in education, as well as for their contribution to a wider community. In functional terms, centrality is of particular significance to neighbourhoods or city districts if educational landscapes also take on the role of community centres (alone or jointly).

- *Connectivity*: one important approach used in the eight case studies is to create or strengthen connections in the sense connecting spaces and uses, institutions and people. The aim is to create synergies, promote cross-programming and programmatic integration, multiple use. Connectivity is treated at different scale levels: site, neighbourhood, and city. The spatial proximity of the different educational establishments offers the potential to make an educational campus easier to access, explore and experience (see Fig. 3). Networks are created

Fig. 2 Centralisation strategy of middle and secondary schools to the medieval town centre of Bernburg forming the "Campus Technicus" (*Source* TU Berlin/University of Siegen, Graphic: Zuzana Tabackova, based on IBA-Büro GbR 2007, p. 4f., 11–13, Map data © OpenStreetMap contributors)

which have both a spatial and an institutional effect and have (are intended to have, will have) an influence on the morphology of the city. When it comes to connectivity, attempts are being made to break down physical barriers and to lowering thresholds by spatial connection (visual axes, access routes, etc.). The spatial proximity of the different educational establishments offers the potential to make an educational campus easier to access, explore and experience.

- *Open and closed spaces for learning*: A central topic when planning educational landscapes and putting them into practice is whether they are opened or closed up. On the one hand educational landscapes may open up to the outside world, with regard both to their programs and their spaces and design (f. e. by fences, walls, entrance gates, facades, network of roads and walkways) (see Fig. 4). On the other hand, educational landscapes may define physical borders between institutions on the campus itself. There are discussion about whether schools should open up and educational landscapes should connect with the neighbourhood as a multi-used space for learning and community services, and on the other hand about aspects of safety (incl. existing safety regulations) and familiarity, especially with younger children. The result is that educational landscapes are defined spatial zones within a local neighbourhood setting that may have an educational programming on its own (see Figs. 5 and 6).

Fig. 3 Development of an educational landscape on a site of former military barracks adding towards an existing swimming pool and elderly home (*Photograph* Miklas Wrieden, on behalf of the city Osterholz-Scharmbeck)

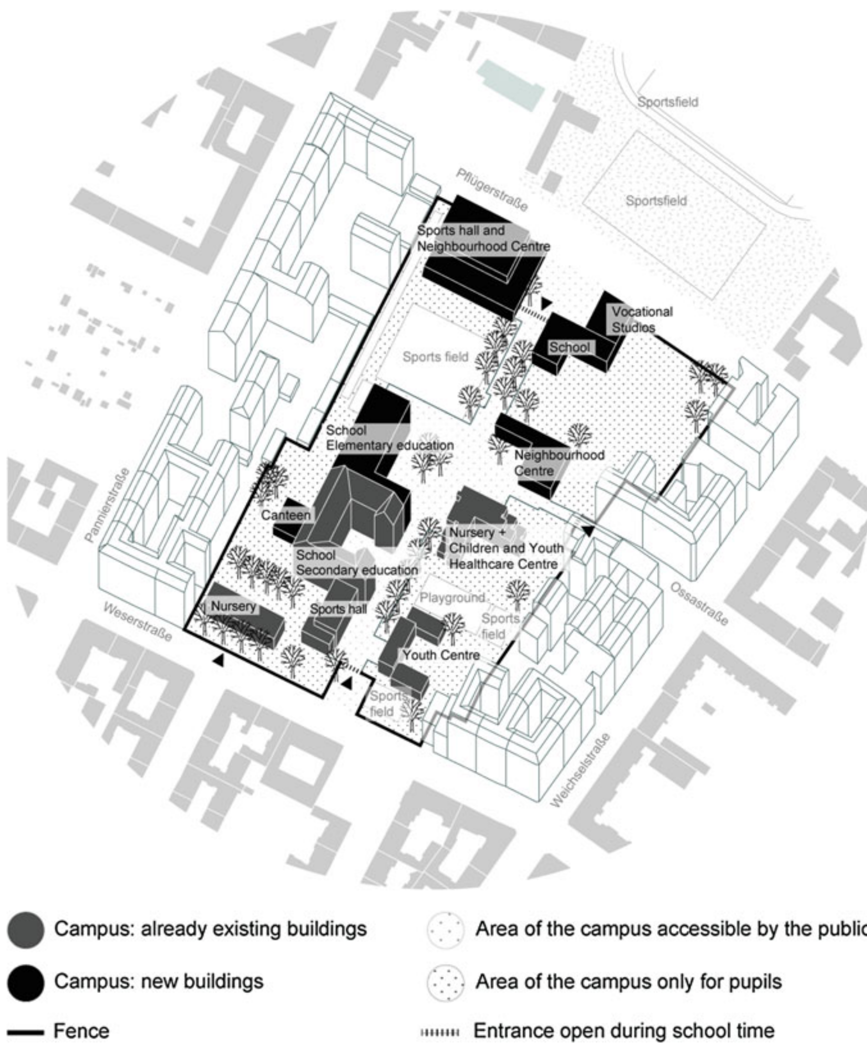

Fig. 4 Opening-up and closure of the educational landscape "Rütli Campus" (*Source* Berlin Institute of Technology/University of Siegen, Graphic: Zuzana Tabackova, based on: Bezirksamt Neukölln von Berlin 2015, Map data © OpenStreetMap contributors)

Fig. 5 Educational landscape “Tor zur Welt” in Hamburg and its back facades towards the neighbourhood (*Source* TU Berlin/University of Siegen, Photograph: Christine Loth)

Fig. 6 Educational landscape “Tor zur Welt” in Hamburg and its fences towards the neighbourhood (*Source* TU Berlin/University of Siegen, *Photograph* Christine Loth)

Conclusion

With this research a systematic empirical contribution is made to reconstructing the links between the education system and urban development, which are frequently mentioned as positive, though with little verification. The first part of our research project shows via policy study shared and overlapping themes in educational and urban planning policies on the federal, state and inter-municipal scales, such as the foci on socially disadvantaged neighbourhoods, children and young people, quality of neighbourhoods and peoples educational biographies, school programs and school construction. On the other side blind spots and missed chances of cross-policy programs and action can be identified, such as policies for life–long-learning, informal institutional and spatial settings for learning. An integrated urban development approach, which is demanded as prerequisite for federal or state funding in municipalities is not yet practice at state or federal level.

Furthermore we can draw a clearer picture on the socio-spatial character of educational landscapes. Spatial setups of educational landscapes are filled by the actors with expectations towards a higher accessibility to education and better transitions between educational institutions on the one side and the aim of urban planners and designers, to develop cities, towns, districts or neighbourhoods by location and spatial design of educational landscapes on the other side. When it comes to the urban form and the programmatic setup of socio-spatial educational landscapes, the campus idea is dominating. It incorporates spacing strategies of centrality, connectivity and the opening up and closure of campus life towards its urban context. At the end we can conclude, that the new idea of educational landscapes uses a rather traditional spatial setup of the campus. The question for our future research is whether this setup in atmosphere and programming is working on a daily base towards the named expectations of educationalists and urban planners and designers.

Bibliography

Berse, C. (2009). *Mehrdimensionale Bildung im Kontext Kommunaler Bildungslandschaften. Bestandsaufnahme und Perspektiven*. Opladen: Budrich.

Bezirksamt Neukölln von Berlin. (2015). *Bauen auf dem Campus Rütli – CR²*. http://campusruetli.de/bauen/. Accessed 17 Mar 2016.

Bleckmann, P., & Durdel, A. (Eds.). (2009). *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen*. Wiesbaden: VS.

Bleckmann, P., & Schmidt, V. (Eds.). (2012). *Bildungslandschaften. Mehr Chancen für alle*. Wiesbaden: VS.

Blum, S., & Schubert, K. (2011). *Politikfeldanalyse* (2nd ed.). Wiesbaden: VS.

BMFSFJ—Bundesministerium für Familie, Senioren, Frauen und Jugend (Ed.). (2005). *Zwölfter Kinder- und Jugendbericht. Bericht über die Lebenssituation junger Menschen und die Leistungen der Kinderund Jugendhilfe in Deutschland*. Berlin.

BMVBS—German Federal Ministry of Transport, Building and Urban Development. (2012). *National urban development policy. A joint initiative by the federal, state and local governments*. http://www.nationale-stadtentwicklungspolitik.de/NSP/SharedDocs/Publikationen/EN/ausstellung_en.pdf?__blob=publicationFile&v=1. Accessed 17 Mar 2016.

Böhme, G. (2006). *Architektur und Atmosphäre*. Munich: Wilhelm Fink Verlag.

Coelen, T., Heinrich, A. J., & Million, A. (2016). Bildungslandschaften als Strategie der Stadt- und Quartiersentwicklung. In P. Oehler, N. Thomas & M. Drilling (Eds.), *Soziale Arbeit in der unternehmerischen Stadt. Kontexte, Programmatiken, Ausblick* (pp. 145–159). Wiesbaden: VS.

Curdes, G. (1997). *Stadtstruktur und Stadtgestaltung* (2nd ed.). Stuttgart: Kohlhammer.

Deutscher Städtetag. (2007). *Aachener Erklärung des Deutschen Städtetages anlässlich des Kongresses "Bildung in der Stadt" am*. 22/23 Nov 2007. Cologne. http://www.staedtetag.de/imperia/md/content/pressedien/2007/17.pdf. Accessed 10 Sept 2014.

Deutscher Verein für öffentliche und private Fürsorge e. V. (2007). *Diskussionspapier des Deutschen Vereins zum Aufbau Kommunaler Bildungslandschaften*. http://www.deutscher-verein.de/05-empfehlungen/empfehlungen_archiv/empfehlungen2007/pdf/Diskussions-papier_des_Deutschen_Vereins_zum_Aufbau_Kommunaler_Bildungslandschaften.pdf. Accessed 10 Sept 2014.

Edelhoff, S., & Uttke, A. (2010). Bildungslandschaften – Lernorte gestalten und vernetzen. *Planerin, 5*, 3–4.

Hasse, J. (2012). *Atmosphären der Stadt*. Berlin: Jovis.

Hasse, J. (2015). *Was Räume mit uns machen – und wir mit ihnen*. Freiburg, München: Verlag Karl Alber.

IBA-Büro GbR on behalf of the city Bernburg (Saale). (2007). *ZukunftsBildung. Treibhaus Bernburg*. http://www.iba-stadtumbau.de/download.php?f=c6925c392229675534fa7371213cd88f&target=0. Accessed 17 Mar 2016.

Mack, W. (2008). Bildungslandschaften. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 741–749). Wiesbaden: VS.

Mayring, P., & Gläser-Zikuda, M. (Eds.). (2008). *Die Praxis der qualitativen Inhaltsanalyse* (2nd ed.). Weinheim: Beltz Verlag.

Meuser, M., & Nagel, U. (2010). Experteninterviews – Wissenssoziologische Voraussetzungen und methodische Durchführung. In B. Friebertshäuser, A. Langer, & A. Prengel (Eds.), *Handbuch Qualitative Forschungsmethoden in der Erziehungswissenschaft* (pp. 457–471). Weinheim: Juventa-Verlag.

Million, A., Heinrich, A. J., & Coelen, T. (2015a). Educational landscapes and urban development. Contextual and spatial interfaces and linkages. *Planning Practice & Research, 30*(5), 587–601. doi:10.1080/02697459.2015.1023069.

Million, A., Machemer, P., & Kotval, Z. (2015b). Engaging and educating young people in sustainable development: Communicating research findings and planning practice in an active learning environment. In E. Silva, P. Healey, N. Harris, & P. van den Broeck (Eds.), *The Routledge handbook of planning research methods* (pp. 502–517). New York: Routledge.

Reicher, C. (2012). *Städtebauliches Entwerfen*. Wiesbaden: Vieweg + Teubner Verlag.

Schneider, V., & Janning, F. (2006). *Politikfeldanalyse. Akteure, Diskurse und Netzwerke in der öffentlichen Politik*. Wiesbaden: VS.

Uttke, A. (2009). *Supermärkte und Lebensmitteldiscounter. Wege der städtebaulichen Qualifizierung*. Dortmund: Verlag Dorothea Rohn.

Westle, B. (Ed.). (2009). *Methoden der Politikwissenschaft*. Baden-Baden: Nomos.

Part III
Education and the City

Educational Landscape Straddling Spaces and Education

Petra Bollweg and Hans-Uwe Otto

Abstract The idea of an educational landscape is linked to education policy goals, theoretical considerations, models and reports from practice. The "ideal" landscape opens up new constructive options for municipalities, offering increased social justice and ways for all citizens to develop, but also blocking paths. Until now, especially at the stage of childhood and adolescence, conventional approaches to educational landscapes have focussed on places—places of learning and education—where people learn, are brought up and taught in linear temporal sequences. As such, their implementation has thus only included topographical observations of pedagogically stage-managed "exclusive" settings (educational and otherwise), which need to be surmounted for future educational landscape projects. This chapter looks at educational landscapes "from the bottom up", i.e. seen from the point of view of the subject, and topologically determines them taking into account the aspect of education within urban spaces. To achieve this, not only considerations from spatial theory but also positions from child and youth welfare policy are used to describe space (e.g. urban space) as a space for opportunities, especially for disadvantaged children and youth; this is discussed from the pints of view of access, use and democratic co-determination.

Keywords Educational landscape · Space · Educational disadvantage · Educational and urban policy · Municipal policy

P. Bollweg (✉)
Faculty of Social and Behavioural Sciences, Institute of Educational Science,
Friedrich Schiller University Jena, Jena, Germany
e-mail: petra.bollweg@uni-jena.de

H.-U. Otto
Faculty of Educational Science,
Center of Social Service Studies/Bielefeld Center for Education and Capability Research,
Bielefeld University, PF 100131, 33501 Bielefeld, Germany
e-mail: hansuwe.otto@uni-bielefeld.de

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The term "educational landscape" accentuates the interaction between childraising, education and day-care in social spaces (usually local), the planning of which is increasingly falling under local, municipal and regional responsibility. As a key term used in discussion on educational policy, it points towards the heterogeneous, territorial strategies designed to improve the circumstances in which learning and education take place, so as to stand up to national and international competition. The main goal, meanwhile, is to create "successful" conditions for education in a region, municipality, city or city district, and to encourage them to take root. From the point of view of policy on children and young people, apart from anything else, this topic opens up questions of how to encourage them appropriately, with equal opportunities and individual development. In this respect, municipalities have a duty to come up with and provide new approaches and options for cognitive, social and emotional development for all children and young people—and, taking a broader view, for all the citizens in a community. This means that the term "educational landscape" brings up questions related not only to infrastructure and urban development but also to the spatial dimension of education (e.g. within a city), involving access, use and, in the end, democratic rights to participation and involvement. Here, education needs to be understood as a process affecting individual subjects, equally entailing "not only discovering their identity and the skill to live their own, independent lives but also relationship skills, solidarity, public spirit or the ability to take on social responsibility" (cf. Rauschenbach and Otto 2004, p. 23). In addition to this, education can also be understood as a "component which transcends the given conditions" (Stolz 2006, p. 128).

In our opinion, combining the terms "education" and "landscape" does not go far enough if this is understood merely as adding up the mathematically calculable, empirically observable measures and offerings in a local community and bringing them together to interact and influence one another in a jointly run educational scheme. A scheme of this type leaves aside non-institutionalised, non-functionalised areas where the subject goes to gather experience and opportunities for development, or which are produced through the flexible use of spaces, such as public spaces.[1] However, these areas appear to be absolutely vital if the subject, or the subject's perspective, is to consistently be placed at the centre of an educational landscape, and in order to move from a topographical understanding, relating to a specific place, to a topological understanding relating to spaces. Linking in with this dual perspective on the educational landscape, the following initially roughly outlines the

[1]Where the term "subject" is used here and below, we are referring, among other things, to the work of Scherr (2008), who dealt with the terms "subject" and "subjectivity" in the context of educational theory. The central issue behind the theory of education in the social sciences is analysing "social conditions and arrangements […] which shape the realm of possibility for processes of subject formation can take place" (ibid.). Despite any reservations about the use of the term "subject", Scherr believes, "it can be put to use in education theory as long as it is not used to fix and 'totalise' self-awareness and the capability for self-determination as 'individual qualities', but is employed to denote 'potential which can be sorted into grades and dimensions of ways of life which can be described empirically" (ibid., p. 143).

focuses of a corresponding educational discourse, before going on to examine the move from topographical to topological planning. Our underlying assumption is that spatial issues only come up as a result of a relational, dynamic and/or flexible relationship between the subject and the spaces they actually experience (cf. Behnken and Honig 2012, p. 11; Löw 2001) and spaces which they are able to experience, once again raising yet more clearly the issue of what enables and hinders their development, especially in the case of the opportunities open to disadvantaged children and young people.

The Educational Landscape: Between an Idea and Its Implementation

The idea of an educational landscape is linked to education policy goals, theoretical considerations, models and reports from practice. The "ideal" landscape opens up new constructive options for municipalities, offering increased social justice and ways for all citizens to develop, but also blocking paths. In this context, two central aspects can be identified which can be described as questions about the rationales behind (1) and debates (2) about educational landscapes. This brings to light a third aspect linked to questions about the topographical features of an educational landscape (3).

1. The rationale behind an educational landscape usually involves a deleterious or negative perception of local problems, seen as issues specific to a certain area, to which a locally adapted answer is provided. This is based on the features offered by the local infrastructure, seen together or as a whole, focussing not only on the school or other institutions (pedagogical or otherwise) but also taking into account transitional systems between the kindergarten and the school or between the school and work or vocational training, and how they correlate. The local area, as a territorial unit (region, community or town) acts a basis for planning, coordinating, launching and keeping tabs on processes (cf. Minderop and Solzbacher 2007). At the heart of this combination of municipal strategies and concepts from educational theory are social and socio-political questions, challenges and policies (cf. Mack 2008). Usually, the emphasis is on the need to modernise schools, and the focus is on municipally rooted institutions, organisations, clubs and/or facilities from civil society, seen as actors in the field of education. This view of different educational places and actors "as a whole" is all about a change in how the different places of education see themselves (inward perspective) and their interaction with other institutions, facilities and offerings (outward perspective). With regard to their integration into an overall concept which is binding for all parties involved, this means them "seeing themselves from now on as part of a larger, framing whole" (Reutlinger 2011, p. 56f.).

2. The systematic debate on differentiating between formal, non-formal and informal education has produced a crucial, far-reaching change in the way that approaches to learning and education are viewed (cf. Thiersch 2006). In this context the term "*Ganztagsschule*" (denoting schools which offer extracurricular educational activities, extending the German school day) is a code word for a concept built upon social theory, used to provide "opportunities for children and young people to build an identity and gain skills" and to bring those opportunities together "based on the particular features of each institution, and thus its structural principles with regard to education" (Coelen and Otto 2008, p. 17). On this basis, the concept of an educational landscape can be used to stop the entire day being misappropriated for purposes of planned childraising and education, instead allowing different contexts of learning, teaching and experience to be included, integrated not in an abstract manner (focusing on performance or market value) but in concrete terms (focusing on practical value) (cf. Otto and Ziegler 2004).
3. Organising an educational landscape means basically, and necessarily, recognising all the places of learning and education in a local, municipal and/or regional community. Viewed from a narrow, topographical perspective, historical institutions entrusted with an educational task are just one part of this (a relatively small part in biographical terms), as the "lifelong" processes of learning and education can no longer be restricted to specially organised, planned, "exclusive" settings. A quantitatively larger part comes about through the subjective use of time, places and content in "spaces of opportunity" (Rauterberg 2013, p. 13). The urban space in which individuals act and interact, gain experience and search for opportunities is becoming a constitutive issue for "flexible" education. From a topological point of view, the significance of the subjective "liveability" of a space comes up especially when that liveability is not only the aim of an institution as, for example, when a school opens up to the nearby social environment. Instead, the point is to integrate the spaces and freedoms which allow for cognitive and social development and are "objectively" beyond the reach of any pedagogical staging of education (cf. Bollweg and Otto 2011). When it comes to conceptualising the educational landscape concept, the interplay of existing formal, non-formal and informal possibilities offers numerous views of and prospects for alternative approaches to learning and education.

Viewed with a critical eye, the various discussions on the reasons for creating educational landscapes have each produced their own, usually conventional set of topics, leading to totally different strategies. On closer inspection, through the ideological policy they generate, they reveal the structure of power and interests behind each of these programmes (cf. Bollweg and Otto 2011). This turns the educational landscape project into a labyrinth of political interests, in that management becomes a central criterion (cf. Bollweg 2014) (on this subject, see also Niemann in this volume).

If this project is to be implemented sustainably and both as a theoretically founded and analytically transparent model for a greater variety of opportunities, increased self-determination and more self-fulfilment, what is required is a fundamentally new start to municipal organisational responsibility. The question which the following intends to answer is: What would this involve?

From the Place to the Space

In pedagogical thought and measures, spaces are a focal category and "centrally determine how children and young people grow up: private family spaces, spaces set up for educational purposes, such as schools and youth welfare centres, and public spaces", which means that they offer "occasions and opportunities for educating children and young people; hangouts and places where they can meet" (Mack 2008, p. 743).

Until now, with regard to their focus on places of learning and education, conventional concepts for educational landscapes have (only) pointed to the fact that people move "between places which are primarily understood in geographical terms" (Deinet 2010, p. 7). With reference to the stage of childhood and adolescence, this usually means a temporally linear series of places where children and young people are "schooled, advised, cared for or raised" (ibid.). The wider definition of the educational landscape takes in a systematic combination of places which can be described in different territorial terms and placed in a hierarchical order (cf. Bollweg and Otto 2011). It can be assumed that individuals do not move outside the spatial contours of the social norms, rules and restrictions conferred upon places: the point is the scope for action, broader horizons and personal opportunities for development which the existing setting offers, and how individuals can tap them for their own purposes and use them subjectively (in fact or potentially). When the educational landscape is examined from the point of view of education theory, additionally encompassing the spatial perspective, the issue is studied of which windows for negotiation and connection between the subject and the space (and vice versa) are opened up in which spaces; which windows are closed, or why they are not included in empirical observations, or are skipped over.

When the landscape construct is used, the question of which "places" are important to children and young people leads to the question of which opportunities occur for the subject to determine or help determine the shape of those places. On one hand, this points to a need to integrate considerations from the sociology of space, as presented, for example, by Martina Löw (2001). On the other hand, it also raises questions about access (1), use (2) and democratic co-determination (3) when it comes to jointly considering space and education and integrating them into the architecture of "urban education".

1. The shape taken by an educational landscape can initially be laid out based on the question of access or access requirements to “educational spaces”, construed as interactive spaces. For example, for children/young people, formal (structured) access to the school, as a place of learning, comes more or less automatically from their role as schoolchildren, assessed as capable of attending school, and lasts for all nine or ten years of compulsory full-time schooling. Moreover, as schools are consistently opened up to their local environment, their pupils also gain institutionally guaranteed access to cultural and social resources (e.g. for learning and education) which were previously not something they could take for granted. However, this involvement of the local environment takes place on the performance-focused basis of “using” it for school lessons and teaching units (at the same time giving the school an approach which is based more on “real life” and people’s lifeworlds), meeting the requirements of general education policy (cf. Bollweg 2014). This disregards the issue of public, fair, equal access to opportunities for learning and education for those not in the role of a schoolchild, and the issue of conditions for self-determined development and growth, especially for people to whom free access was previously barred or made difficult. These issues call for a broader perspective: the starting point for this is a focus on an educational landscape based on outgrowing pre-existing structures and institutional content, and focusing on the position of the subject. Related to this is a shift from institutional to subject-based normative power.
2. Assuming that municipalities would like to play an active role when it comes to redefining formal, non-formal and informal fields of education which were previously separate (or considered to be separate), there always seems to be a *place* at the heart of any thoughts or actions. This place is available to the municipalities; it is the base from which they can construct processes and reconstruct history. From the perspective of spaces (e.g. social spaces), local geographical places appear to have a longer-lasting effect on individual biographies pertaining to learning and education. The tendency (which can be taken from the debate on this subject) to equate place with space is as inadequate as equating the form of learning with the place of learning (cf. Stolz 2006). If people’s experience of and with space are to be pinpointed and described as one aspect of subjective, individual conditions in the context of a person’s educational biography (within a municipality or otherwise), the first step required is to create a brief topographical sketch of the pre-existing places brought into this description. By contrast, when the subject is the transversal, individual use of space in terms of time, social elements and content, as in a topology, this is all about a qualitative factor, crucial to the subject, which cannot be pinned down to any topographical purpose or, thus, any “predefined” or “intended” path. Looking forwards, the individual deman for experience space allows public spaces (of education and otherwise) to be used as an opportunity for development and self-fulfilment which is locally based, individually flexible and subject-focused. A good example of quite how flexible, short-lived, creative and sometimes even subversive the use of urban spaces can be comes from the

various activities identified as “urbanism from below” (Rauterberg 2013, p. 35) which, under headings such as “urban gardening” or “guerrilla knitting”, not only attract media attention but also, as in the case of “transition town” projects, for example, signalise an interest in alternative ways of living urban life (ibid.). This raises central questions of who in fact has what kind of interest in using urban spaces as a space for gaining experience and opening up opportunities, and who uses those spaces how. Conversely, who will honour or give credit to “free”, creative activities in public spaces if they have no pedagogical intention and are initiated by children or, especially, young people themselves? Until now, from the point of view of policy on children and young people, the main issue has after all been how to get young people reintegrated into public spaces (cf. Deinet et al. 2009).

3. If the educational landscape is to be addressed as a space for flexible education focusing on the dimensions of access and use, all developmental spaces have a central position as spheres of opportunity and experience which form the basis for education as a means of learning for life, and evade any requirements for using or exploiting “objectively” definable educational “content” designed with a specific (e.g. pedagogical) purpose in mind. It thus remains doubtful as to whether the prioritisation of formal institutions for the stages of childhood and youth evident until now in the general discussion on educational landscapes is the most suitable method or really helpful. Nonetheless, schools and the field of early childhood education open up an initial gateway to the educational landscape, and their binding regulations guarantee access to learning and education in the municipality which generally also has an effect on the children’s and young people’s families: children at kindergarten and school always have parents or legal guardians, who can themselves be said to have increasing opportunities for decision-making and organisational involvement (cf. Bollweg and Otto 2011). Through the “*municipalisation* of education” (cf. Bleckmann 2009; emphasis in original), too, the end to the exclusive state monopoly on education implicitly and explicitly hands responsibility for educational tasks to communities comprising a large number of actors, such as parents, the maintaining bodies behind institutions for children and young people, state-run administrative and decision-making levels, civil society organisations and local and/or regional industry (cf. Duveneck 2011). This rearrangement redefines the relationship between educational actors and institutions following democratic principles, with rights of exit, voice and choice that confront localisable institutions with the challenge of designing their educational offerings and measures to focus on the subject and on users’ needs and interests (within their lifeworlds). The problem which could arise here is that, as well as the additional opportunities for decision-making and co-determination produced within and by means of communities entrusted with responsibility, a large number of educational actors, new or old, may appear who then, in turn, are given their own “chances” to use the combined opportunities falling under the undefined,

powerful term “education”, with its positive connotations, for their own interests. These may link back to performance-based education and economic exploitation. This would, however, run in the face of the aspects of subjective “experience of space” which are so central to implementing educational landscapes using the theory of space.

Education Within Urban Spaces: An Outlook

To conclude, it can be said that any idea of education within urban spaces which is envisaged in the form of an educational landscape needs to ask questions about the fundamental concept and its implementation, if the basis for that idea is to be spelt out in terms of the theory of space. The dimensions of access, use and democratic co-determination are the aspects which can be used to place the subject consistently in the focus, linking in with the need to arrange opportunities for development and self-fulfilment which are locally based, with an understanding of the locality: picking out spaces where people gain, or can potentially gain experience from the point of view of the subject is the relevant factor which goes hand in hand with a recognition and awareness of the many exciting opportunities offered by the municipality. A landscape which is based on encouragement, development and a successful, self-determined way of leading one’s life emphasises the non-predetermined, individual, personal and thus constitutive factor of living in/experiencing a space, taking up the subject of spaces “between the positions which they [people; author’s note] take up within society and the ways of life connected to them” (Becker et al. 1997, p. 13). This means that the central point is an educational landscape aimed at chances and opportunities for fulfilment, which involves understanding the subject as a set of prospects (e.g. for development). This could be an approach used to overcome institutional borders, opening up real chances and opportunities within the municipality for children and young people, especially, to take action; opportunities which can be extended as required. In political terms, such as within the municipality, this then raises questions about what conditions, educational and otherwise, are to be provided or prevented (cf. Scherr 2008).

Following the path of urban spaces thus means taking various different understandings of space into consideration, and the constitution of each space depends on the vantage point or position from which it is viewed. The question which arises is that of “the angle from which one relates to the space” and how the subject constitutes and articulates “his or her” space; “describes, experiences, lives out, builds, destroys, moves through, discusses it, etc.” (Reutlinger 2006, p. 260). The nature of space should thus be understood as a social process which is inherently flexible, and dependent on social and material conditions. Here, social actions and social development are linked to social hierarchies (of power), meaning that spaces are created in a constant flow, with a structuring, reproductive effect (cf. Löw 2001).

From the point of view of policy on children and young people, in the context of educational landscapes the aim is to "*leave spaces* and *create spaces* in the sense of contexts of enablement" (Reutlinger 2009, p. 20; original emphasis). As "spaces of democracy", these spaces need to be made accessible to all people, with all their different ideas (e.g. of education), coping strategies (e.g. for coping with life) and creative processes (ibid., p. 19). This raises the question of which political actor (collective or otherwise) is ready and able to demand, with the necessary insistence, that this plan be carried out, driven by the overriding aim of achieving social justice and personal autonomy for everyone involved: who can put it into action in its entire breadth, opening up greater chances for development and self-fulfilment not only for all children and young people but, especially, for all those whose situation in life forces them onto the margins of social possibility.

Bibliography

Becker, G., Bilstein, J., & Liebau, E. (1997). Räume bilden. In G. Becker, J. Bilstein, & E. Liebau (Eds.), *Räume bilden. Studien zur pädagogischen Topologie und Topographie* (pp. 10–16). Seelze-Velber: Kallmeyersche Verlagsbuchhandlung.

Behnken, I., & Honig, M.-S. (Eds.) (2012). Foreword to 2012 edition. „Der Lebensraum des Großstadtkindes": Eine Pionierleistung der Kindheitsforschung. In M. Muchow & H. H. Muchow (1935), *Der Lebensraum des Großstadtkindes*. Neuausgabe (pp. 9–16). Weinheim, Basel: BeltzJuventa.

Bleckmann, P. (2009). Lokale Bildungslandschaften: Ein Weg zur Demokratisierung von Bildung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommune* (S. 77–85). Wiesbaden: VS.

Bollweg, P. (2014). Bildungslandschaft. In K. Böllert (Ed.), *Kompendium Kinder- und Jugendhilfe*.

Bollweg, P., & Otto, H.-U. (2011). Bildungslandschaft. Zur subjektorientierten Nutzung und topologischen Ausgestaltung. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 13–35). Wiesbaden: VS.

Coelen, T., & Otto, H.-U. (2008). Zur Grundlegung eines neuen Bildungsverständnisses. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 17–25). Wiesbaden: VS.

Deinet, U. (2010). Von der schulzentrierten zur sozialräumlichen Bildungslandschaft. http://www.sozialraum.de/von-der-schulzentrierten-zur-sozialraeumlichen-bildungslandschaft.php. Accessed 8 April 2010.

Deinet, U., Okroy, H., Dodt, G., & Wüsthof, A. (Eds.), (2009). Betreten erlaubt! Projekte gegen die Verdrängung Jugendlicher aus dem öffentlichen Raum. Soziale Arbeit und sozialer Raum (Vol. 1). Opladen & Farmington Hill: Barbara Budrich.

Duveneck, A. (2011). Kommunen übernehmen Verantwortung für gute Bildung. In Heinrich Böll Stiftung (Ed.), *Kommunale Bildungslandschaften. Ein Bericht von Anika Duveneck und Einblicke in die Praxis von Sybille Volkholz*. Schriftenreihe zu Bildung und Kultur 9 (pp. 9–41). Berlin.

Löw, M. (2001). *Raumsoziologie*. Suhrkamp: Frankfurt a. M.

Mack, W. (2008). Bildungslandschaften. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 741–749). Wiesbaden: VS.

Minderop, D., & Solzbacher, C. (2007). Ansätze und Dimensionen – eine Einführung. In C. Solzbacher & D. Minderop (Eds.), *Bildungsnetzwerke und Regionale Bildungslandschaften. Ziele und Konzepte, Aufgaben und Prozesse* (pp. 3–13). Munich, Unterschleißheim: Wolters Kluwer Germany.

Otto, H.-U., & Ziegler, H. (2004). Sozialraum und sozialer Ausschluss. Die analytische Ordnung neo-sozialer Integrationsrationalitäten in der Sozialen Arbeit (Teil 2). *neue praxis 34*, 271–291.

Rauschenbach, T., & Otto, H.-U. (2004). Die neue Bildungsdebatte. Chance oder Risiko für die Kinder- und Jugendhilfe? In H.-U. Otto & T. Rauschenbach (Eds.), *Die andere Seite der Bildung. Zum Verhältnis von formellen und informellen Bildungsprozessen* (pp. 9–29). Wiesbaden: VS.

Rauterberg, H. (2013). *Wir sind die Stadt! Urbanes Leben in der Digitalmoderne*. Frankfurt a. M: Suhrkamp.

Reutlinger, C. (2006). Standort. In A. Dzierzbicka & A. Schirlbauer (Eds.), *Pädagogisches Glossar der Gegenwart. Von Autonomie bis Wissensmanagement* (pp. 254–262). Vienna: Löcker.

Reutlinger, C. (2009). Raumdeutungen. In U. Deinet (Ed.), *Methodenbuch Sozialraum* (pp. 17–32). Wiesbaden: VS.

Reutlinger, C. (2011). Bildungsorte, Bildungsräume und Bildungslandschaft im Spiegel von Ungleichheit – Kritischer Blick auf das „Räumeln" im Bildungsdiskurs. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 51–69). Wiesbaden: VS.

Scherr, A. (2008). Subjekt- und Identitätsbildung. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung. Das Handbuch* (pp. 137–145). Wiesbaden: VS.

Stolz, H.-J. (2006). Dezentrierte Ganztagsbildung: Diskurstheoretische Anmerkungen zu einer aktuellen Debatte. In H.-U. Otto & J. Oelkers (Eds.), *Zeitgemäße Bildung. Herausforderung für Erziehungswissenschaft und Bildungspolitik* (pp. 114–130). Munich: Ernst Reinhardt.

Thiersch, H. (2006). Leben Lernen, Bildungskonzepte und sozialpädagogische Aufgaben. In H.-U. Otto & J. Oelkers (Eds.), *Zeitgemäße Bildung. Herausforderung für Erziehungswissenschaft und Bildungspolitik* (pp. 21–36). Munich: Ernst Reinhardt.

Education in the City from the Perspective of Social Spaces

Wolfgang Mack

Abstract Recent educational discussion has started to adopt a perspective focusing on social spaces which also frames the city as a central point of reference and reflection. Cities have always been special places of education. Thanks to their central spatial function with regard to their surroundings, cities fulfil relevant functions in the field of formal education, and act as important places and opportunities for non-formal and informal education. At first sight, education and the city —or policy on education and the city—have the same interests and positions. This merely underlines the agenda in terms of shared objectives and interests relating to educational and urban policy. However, the relationship between education and the city should be viewed with a critical eye, placing issues resulting from conflicts of interest and social disparity on the urban policy agenda, as well as broken promises and as yet unresolved conflicts.

Keywords Social space · City · Education · School · Appropriation · Educational inequality · Segregation

Education needs the city; the city needs education. Current discourses on education and the city can be boiled down to this formula. Social pedagogy, especially, recent educational discussion has started to adopt a perspective focusing on social spaces which also frames the city as a central point of reference and reflection. Urban sociology reveals that the structure and organisation of the education system have an interdependent relationship to processes of segregation in urban spaces. For urban planning and development, education and the structure of the city's publicly funded educational programmes are a critical, highly important reference point. How, then, is the city important for education, and what importance is ascribed to education by the city?

W. Mack (✉)
Faculty of Special Education, Ludwigsburg University of Education,
Pestalozzistr. 53, 72762 Reutlingen, Germany
e-mail: mack@ph-ludwigsburg.de

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Looking into the links between education and the city, or between educational policy and urban policy, at first glance the congruent interests and positions seem to answer the question. However, this only underlines the shared aims and interests of policy on education and urban issues. The links between education and the city should in fact be examined critically. This brings to light conflicts of interest and social disparities; unfulfilled promises and unresolved contradictions appear on the political agenda around education and the city.

The Municipal Interest in Education

Cities have always been places of education. Since the Renaissance, educational establishments have been set up for the bourgeoisie and universities have been founded in cities. There are, of course, exceptions, from monasteries as a place of learning in the Middle Ages to the schools of pedagogical reform founded in the provinces at the start of the twentieth century. Nevertheless the city remains a special place of education. It is not only their spatially central function with regard to their surroundings which gives cities an important role in the field of formal education (especially at secondary level, with the Gymnasium and vocational school); cities provide important places and opportunities for non-formal and informal education.

Currently, a new interest in education is being articulated within cities which calls into question traditionally ascribed tasks and responsibilities. Until now, in the school sector municipalities have only been responsible for "external school affairs"; for providing and maintaining school buildings, for managing and organising them. With regard to "internal school affairs", cities and municipalities are more or less on the outside; they are not involved in key decisions on school issues. This is changing with the introduction and expansion of all-day schools, with new forms of schooling such as the district school or community school as a new form of comprehensive school. This, in turn, is reflected in a new interest in education within municipal politics, as expressed by the Association of German Cities in its 2007 "Aachen Declaration". This declaration focuses on cities' work in educational policy, from early childhood support at day-care centres to education programmes at adult education centres. There is particular interest, however, in the cities' new role in shaping schools; this is no longer restricted to "external school affairs". As the Aachen Declaration expresses, for cities education is primarily a location factor, and thus plays a role in cities' economic stability and development (see also Jahnke and Hoffmann in this volume). In intercity competition, good conditions for education are a key factor behind attracting well-qualified skilled workers for local industry. Moreover, it is only through good education opportunities for the city's children that their social status can be maintained from one generation to the next, giving them the chance of upward social mobility.

However, municipal education policy can no longer be content with merely creating the conditions for attractive formal and non-formal education programmes

in the city. In the complex mix of citizens' different, contradictory interests, municipal education policy is increasingly being called upon to find a balance between these interests and positions through political decisions on issues around school location and new school types introduced to the city. It is also called upon to mediate and create links between formal and non-formal educational schemes, as well as increasingly being charged with important, if not indispensable coordination tasks within education, especially regarding the transition from school to training and work.

Spaces and Opportunities for Education in the City

Education is an active process carried out by subjects who engage with and appropriate the world. One key to understanding education is to recognise the subject's independent activity during this appropriation and engagement, through which they create a specific personification of their own life. Education in this sense means the self-constitution of the subject by "appropriating reality and developing a profile of their life through this appropriation" (Thiersch 2004, p. 240).

As an independent activity carried out by the subject, education cannot take place in isolation from the world, without interaction with others. In this understanding, education is a process of co-production involving the subject's activity and the social conditions of the process itself. The subject in education relies on other, opposing actors within the education process who are indispensable for processes of appropriation and engagement. Thus, what gives the education process its distinctive shape is the subject and the section of the world in which the processes of appropriation and engagement occur. On the part of the subject, as the actor, this means that the education process is determined by the resources and structures which exist and are made available, while on the part of the co-producers it is largely shaped by significant other parties and the sections of the world which they represent. Thus, education is socially determined.

Social disparities are expressed directly in what goes on in education. The definition of education outlined here provides an insight into the social conditions for education and into the way that social inequality affects the shape of individual education processes. This allows education to be linked to the actual living conditions of children, young people and adults, opening up the educational discourse to the social sciences' 'focus on subjects' situations in life and the demands made on them to retain their agency in those situations. As a result, the relationship between education and the city can also be examined.

This means of access via the social sciences turns the link to subjects' social situation into a constitutive element of thought on education and of educational programme planning. From the point of view of educational biographies, the focus is on educational events as a whole. Here, formal, informal and non-formal education are analytical categories used firstly to more precisely define contributions to an educational process covering subjects' entire biographies, and secondly to more

precisely analyse weak points and problems with relation to individual educational processes (cf. Twelfth Report on Children and Youth 2005).

If thought on education theory does not remain limited to individual institutions and specific functions of education—i.e. if educational events (cf. Thiersch 2011) are viewed as a whole—then one issue to be examined is the educational conditions and opportunities inherent to the city. This means informal education in children's everyday lives, in families, especially the intergenerational transmission of habitual attitudes and practices in families (cf. Büchner and Brake 2006); it means informal forms of education as the "everyday eduction" (cf. Rauschenbach 2009) which the school has traditionally built upon as an institution of formal education, and on which it can rely less and less. This is why it becomes necessary to mediate between forms of education which take place in people's everyday life in their family, in non-formal education schemes and options arranged by the youth welfare services and the formal educational schemes and expectations in school. All these forms of education can be found in the urban context; the issue is thus the structure and quality of the city as an educational space.

Challenges and Perspectives

From the point of view of social spaces the issue is how social inequalities are reproduced in terms of social spaces within the educational space of the city, and how educational opportunities are unequally distributed within urban space as a result. Here, structures and institutions for formal and non-formal education need to be examined, as well as the quality of opportunities and possibilities for informal education within the urban space.

Social Disparities as a Challenge for Municipal Education and Youth Policy

In schools in socially disadvantaged neighbourhoods, or in schools whose pupils come from marginalised living areas, inequalities in the education system and the lack of educational opportunity among children and young people frequently come to a head. Processes of segregation in social spaces produce disadvantaged districts and residential neighbourhoods. The development and consolidation of marginalised neighbourhoods have many causes in the fields of housing construction and construction policy, economics and labour, social policy, education policy and integration policy. In the long term, policy decisions for building social housing and planning new housing developments create conditions which can only be reversed with great effort. Unemployment and increasing poverty in Germany are also leading to the creation of new socially marginalised neighbourhoods and the

entrenchment of socio-spatial segregation in areas which are already poor. The selective school system in Germany also forces parents to make decisions about which school their children will attend, and which scholastic path they will take: another key factor behind socio-spatial segregation. Unsolved issues around the integration of minorities, especially migrants, and decades without decision-making on integration policy, also need to be included as factors behind socio-spatial segregation.

In certain circumstances, socially disadvantaged neighbourhoods are drawn into a downward spiral, with existing segregation in social spaces aggravated by socially selective migration processes. Residents with higher social status and economic capital move out of these neighbourhoods while residents with lower social status and less economic capital are forced into them. Three neighbourhood effects have a negative influence on residents of disadvantaged neighbourhoods (cf. Häußermann 2008). Firstly, social milieus are created in which behaviours and ways of thinking predominate which deviate from socially recognised norms and behaviours. This is of disadvantage to residents of marginalised neighbourhoods with regard to social participation, especially on the labour market. Secondly, the physical characteristics of a neighbourhood, such as its housing quality, accessibility and infrastructure, also have a disadvantageous effect on its residents. Thirdly, the image of such neighbourhoods has a segregational, stigmatising effect on its residents (ibid., p. 340f.).

Meanwhile, this creates schools in socially marginalised neighbourhoods which attract pupils from families in the lower social status groups. These are at risk of becoming problem schools with nothing to offer for their pupils, and which themselves struggle to cope with the resulting problems. This is why measures are required which put schools in socially disadvantaged neighbourhoods in a position to offer an attractive educational programme for children and young people living in disadvantaged circumstances.

The Significance of Schools in the City from a Socio-Spatial Perspective

What role do schools play in the community? What relations are given between the school and the district? How do schools get involved in the context of their social space? How is the school's location important for its work and its acceptance among users? This is the type of question which arise when this institution of the school is seen from the perspective of social spaces. This does not call into question the functions of the school as an institution within the education system: the school is the central place of formal education in childhood and adolescence. However, it is not a close enough examination of the school. The school is part of the community; in terms of its pedagogical work, its effects and its acceptance among users and the population, the school has to be examined from the point of view of social spaces.

This connote issues around the relationship between the school and the district; around the expectations and interests of school users, and around how the school can help create a municipal educational landscape containing not only schools but also other institutions and places for education, with which individual schools need to interact. This view of education and schooling from the point of view of social spaces takes along new challenges and demands for municipal planning on education, young people and social issues.

For this reason, three levels of meaning are of significance for a socio-spatial analysis of the relationship between schools and the city:

1. The school in the city district

This perspective is about the question of what function a school has for the district where it is located. In other words it is about the relationship between the school and its users' everyday world, as seen in a school's specific work and the programmes it offers. It is about the significance a school has for a community, going beyond its function as a formal institute of education.

2. The socio-spatial arrangement of school sites and its significance for urban society

The way that school sites are distributed across a city and the paths for accessing different school forms in a hierarchically tiered school system also shape socio-spatial circumstances within urban society. From the point of view of social spaces the question thus has to be asked of how locational issues and decisions about school structure affect the city's social structure.

3. The role played by the school in constituting young people's social spaces

In a multitrack school system, the school is a central factor which can open up or close off social spaces to children and young people. This means the children's and young people's scope for action and activity. What places and what social contacts are opened up or closed off to them by the school? Socio-spatial analysis also picks up on this view of the constitution of young people's social spaces by the school.

Socio-spatial analyses of schools can be carried out in the context of urban planning processes and municipal school development planning. Considering demographic development, analyses of this kind are crucial when decisions are made to close schools. During what are often very irrational and emotional struggles between proponents of the different school sites, they help bring factual arguments into the discussion by focusing on schools' significance within people's everyday worlds and on the quality and structure of education within the city. Thus, socio-spatial analyses of this kind could help take account of education as a public task and as part of people's everyday world within the city.

Bibliography

BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (Ed.). (2005). *Zwölfter Kinder- und Jugendbericht.* Berlin: BMFSFJ.

Büchner, P., & Brake, A. (Eds.). (2006). *Bildungsort Familie. Transmission von Bildung und Kultur im Alltag von Mehrgenerationenfamilien*. Wiesbaden: VS.

Häußermann, H. (2008). Wohnen und Quartier: Ursachen sozialräumlicher Segregation. In E.-U. Huster, J. Boeckh, & H. Mogge-Grotjahn (Eds.), *Handbuch Armut und Soziale Ausgrenzung* (pp. 335–349). Wiesbaden: VS.

Rauschenbach, T. (2009). *Zukunftschance Bildung. Familie, Jugendhilfe und Schule in neuer Allianz.* Weinheim, Munich: Juventa.

Thiersch, H. (2004). Bildung und Soziale Arbeit. In H.-U. Otto & T. Rauschenbach (Eds.), *Die andere Seite der Bildung. Zum Verhältnis von formellen und informellen Bildungsprozessen* (pp. 237–252). Wiesbaden: VS.

Thiersch, H. (2011). Bildung. In H.-U. Otto & H. Thiersch (Eds.), *Handbuch Soziale Arbeit* (pp. 162–173). Munich, Basel: Reinhardt.

Educational Landscapes Caught Between Individuals, Organisations and Municipalities

Stephan Maykus

Abstract In this chapter, a theoretical model is developed starting out from the term "educational landscape" and the change in management between educational organisations. This model provides greater clarity when identifying the conceptual basis of networked education, allowing target perspectives to be assessed. It describes dissociations which make up the conceptual basis of the educational landscape as a category within educational science. In addition, a possible heuristic is presented for the model of "significant spatial planning experiences". Understood as an operative network concept, educational landscapes can offer favourable conditions for shaping educational infrastructure, if the groundwork is laid for this in organisations and contexts of municipal administration and planning.

Keywords Educational landscape · Cooperation · Networking · Education · School · Child and youth welfare · Municipality · Recognition · System · Lifeworld

The imagined aims of networked municipal places and qualities of education involve complex long-term processes which touch on various levels, do not follow a strict logic, follow a far from linear course and are empirically difficult to describe (cf. Emmerich 2010, p. 363f.). In addition to this, the boundaries of the education, child raising and childcare system have blurred, giving rise to an important objective among professionals which has the effect of potentialising the complexity: according to the central theory of the professional debate (e.g. cf. Bleckmann and Durdel 2009), in a modernised society, education, childcare and child raising need to be made accessible to municipal planning and management (shaping policy based on professional reflections) as a needs-based, flexible, professional reaction to dynamic lifeworld developments. To sum things up, it can be said that "educational landscape" is a pre-scientific term with more of a symbolic than an analytical effect. Above all, it underlines the perspective of infrastructure and organisation, which

S. Maykus (✉)
Hochschule Osnabrück, Albrechtstr. 30, 49076 Osnabrück, Germany
e-mail: s.maykus@hs-osnabrueck.de

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points to a new, far-reaching quality of networking, reorganisation and harmonisation of transitions between the various municipal institutions. The nature of subjective education processes and the municipal space as an independent educational context are not brought up: the subject is still all too frequently that of changing educational management in existing, spatially neighbouring organisations, rather than changing the educational support given to young people in the relationships of their lifeworld (for a fundamental perspective of the theory see Maykus 2012). This may be related to difficulties with implementation, as practice on the ground requires clear links and prioritisations, connected, most importantly, to a plannable infrastructure (cf. Maykus 2010, p. 322f. and, for the example of municipal inclusion, Maykus 2014a, p. 292f.), but it does not move the issue forward. The solution thus lies not in turning the situation around, i.e. only emphasising subjective aspects related to the lifeworld, but in defining a conceptual basis which helps analyse education and the spatial conditions to which it is subject, using the results to create principles of organisation and infrastructural design. This would lead to a different pattern of thinking about the aspects of the subject, municipality and organisation, while nonetheless assigning them conceptual equality. The limits of what is by comparison a one-sided attitude to networking are also evident from the current extent to which educational landscapes have been implemented in Germany (see also Brüsemeister et al. and Stolz in this volume), revealing a developmental dilemma.

The Developmental Dilemma and Its Consequences for the Guiding Principles of Networked Education

The 12th Report on Children and Youth describes in three different ways the dissolution of boundaries in the system of education, child-raising and childcare. This description is currently being used to work out the relevance to municipal planning, attempting to describe both the trend towards the blurring of boundaries and find an answer to the resulting developmental dilemma (a vague plan of action, the educational landscape, is meant to deal with a vague problem). This situation is outlined in Fig. 1, whose content sums up BMFSFJ, 2005, p. 73f in the form of an original illustration which adds planning-related aspects to the topic. Here, no distinction is made between education, childcare and child raising (the three aspects which together constitute pedagogical efforts to successfully bring up young people in opportunity structures under public responsibility). Only education is addressed as the metacontent of the analysis.

The categorical and thematic complexity associated with educational landscapes should be replaced by another category of educational science. After all, taking the term “municipal educational landscape” (cf. Maykus 2012, p. 22), the “municipal” merely represents the spatial aspect and a new appreciation of administration and policy. Education, by contrast, is a pedagogical concept, a theory of personality

development and learning, and at the same time a function, capability and means of integration; its terms have a clearly normative character (even in this context). Accordingly, if urban development and education (including the significance of space to education) are to be examined, then I advocate the category "space as a sphere of structuration", which is linked to educationally relevant dissociations, i.e. reveals the spatial aspects of the dissociative dimensions of education. Then, network development alone will no longer be the central perspective for theory and planning in this context (as illustrated in Fig. 1), but also differentiation between spatially represented dissociative dimensions which give rise to educational processes—and sometimes, though not always, require an educational practice improved by networking. From this point of view, space in urban districts or municipalities represents various educationally relevant dissociations which take effect in educational biographies and which call for subjective educational processes. These dissociations are: that of knowledge and education (increasing priority on practical knowledge for vocational integration rather than personality development), that of individual and social interaction (changing the constitution of communicative public spheres by mediatising and institutionalising them), that of normative references for individuation and social integration (pluralisation effects of modern societies), that of institutions and their freedom-enabling effects (the primacy of the functionalization of institutions, instead of opening up freedom-guaranteeing communication, as Honneth (2011, p. 89) called it), and finally a resulting new quality of the dissociation, wrapped in modern vocabulary, between systematic guidance and lifeworld experience which would form the basis for people individually managing their own lives, and resists the pull of "technocratically uprooted democracy" (Habermas 2013, p. 92). Why such a complex way of categorising educational networks, considering that they sound like actual practice

Aspect of dissolution	Planning perspective and relevance
temporal/biographical (flexible transitions, passages of status, temporal markings in individuals' biographies)	*opening up access to educational spaces* (creating infrastructure and spaces; keeping them open to development)
institutional (individual institutions' role as forerunners gives way to interplay between different places/actors relevant to education)	*enabling transitions* (creating networks, links, associations between spaces, developing the quality of links)
thematic (procedural and open/dynamic curricula, topics from life, skills profiles)	*providing guidance and meaning* (biographical relevance of schemes, topics and forms of support, attractiveness, practical implementation)
Planning situation: complexity and dissolution of education, childcare and child raising	**Planning aim:** creating complex structures: the quality of the network calls for subjective experience of limitation

Fig. 1 The dissolution of boundaries in the education, child raising and childcare system: relevance to planning. *Source* cf. Maykus (2011, p. 128)

rather than social verification? Because there is a lack of benchmarks for them; instead, network quality is used as a benchmark for evaluation, filling a gap that is by no means conceptually determined and, in addition, overlaps on the ground with educational management as shapable practice (see also Brüsemeister et al. in this volume). The category "Space as a sphere of structuration" (which can create associations through pedagogically designed opportunities acting to create boundaries, reinstate a balance and unleash potential) puts forward four proposals for identifying educational spaces with an accordingly extended understanding of the conceptual nucleus of the educational landscape:

1. Education as the development of life based on liberal principles. The spatial context of dissociative dimensions of education should be reconstructed to counter their freedom-limiting effects: There should be municipal institutions which will (or can) make it possible for people to experience cooperative, negotiative participation, while at the same time being subject to organisation and change. Individual participation in institutions as a process based on liberal principles would be one aim of educational landscapes (cf. Honneth 2011, p. 81ff).
2. Municipal public spheres as the framework for negotiation and communication. The democracy-building potential of a space should be part of an overall idea of space-building: urban districts and municipalities are places for discussion within people's lifeworlds, opening up the chance for them to actively shape the way they live together. The democratic structures of clubs, associations, initiatives etc. can have corresponding educational and developmental effects, especially for young people, even bringing together the conceptual cornerstones of the municipality, identity and education (cf. Richter 2008; Maykus 2012).
3. Education as a cumulation of manifestations within a space. In the context of space, education means being guided by the plural manifestations of personality development: people always have their own ways and means of approaching topics, occasions and opportunities, so the guiding principle should be not "educational chains" (as a trivialised, standardised form) but instead educational spheres or prospects. They represent the local manifestations which make up society, which Nassehi (Nassehi 2011, p. 14ff.) describes as a "polycontextual world" (ibid., p. 27). An urban society thus always also means a polycontextual educational world which makes demands on subjects and organisations.
4. Educational networks as an operative goal. It thus follows that the development of networks and organisations cannot be seen as the conceptual nucleus of educational landscapes (which is in fact made up of points 1–3). Instead, they are a creative means of achieving the conceptual characteristics of networked education more effectively, at least to some extent.

In essence, developing educational landscapes locally means working towards designing spatially sensitive educational processes for young people as a whole (as a single educational biography), creating the prerequisites for these processes in that organisations bring this conceptual nucleus on board and, where necessary, form

networks in order to achieve their goals better, or, by communicating, to refocus attention on and individualise that nucleus. Locally specific features would then appear from the individualisation of the nucleus, rather than that of the network. By this means, the relevance for the target audience, types of organisational logic and municipal spaces are each sorted out separately, then brought back together as elements of the overall project: the educational landscape.

Relevance for the Target Audience, Types of Organisational Logic, Municipal Spaces

One aspect which is not explicitly addressed in any form in educational landscapes is the city council, as a municipal private/civic public sphere which also expresses itself in the municipality. The same is true of the political public sphere. Neither do proposed concepts for implementing educational landscapes describe the city council as an aspect of practice which needs to be produced (for an explanation of the different dimensions of the public sphere, cf. Habermas 1999, p. 86ff and 225ff.). This affects the views of participation which are connected with educational landscapes. Thus, the municipality (public space) does not come up at all in this context as a sphere in which participation is practised. There is hardly any consideration of the influence that the service users (e.g. young people) have on political decisions, on youth-related topics and fields of interest, along with accompanying pedagogically guided processes to unlock potential means of democracy building (cf. Sturzenhecker 2013; Walther 2010; Knauer and Sturzenhecker 2005). After all, the point is that municipal, networked education supports significant learning experiences and education processes which Stecher (2012) brings together with the issue of beneficial educational schemes and structures in the “significant learning experience” model: young people learn in contexts which are influenced on one hand by their educational practice (resources and habitus) and on the other hand by the quality of the schemes on offer (structures, processes, results). The aspect of space can very easily be added to these contexts, in that they are seen as places of active and passive participation (see Fig. 2).

After all, municipal spaces provide local links which are relevant to individuals’ identities. A spatial orientation can initially be seen as an interaction (developing an identity through the interaction between a person and a space/environment as in the duality of structure, see Löw’s sociology of space, 2001), and thus acts as a framework for educational processes and personality development. Networked education links back to promoting educational opportunities (the pedagogical dimension of guidance and enablement) and to compensating for educational disadvantage (social pedagogical support with coping with life and integrating into society). It thus seems essential for the basic features of a sociological theory of identity—which, according to Müller (2011, pp. 119ff.) describes interactions

between biopsychological, social, moral, universal temporal and geographical/ ecological contexts—to be extended to include the category of the municipality, especially with regard to the final aspect. From this point of view, the municipality would be a distinctive characteristic for the process of identity development; a context in which individuals can express their way of life; a condition as a space for availability and a subjective matrix of a biographical experience of time (cf. Maykus 2012). Pedagogical equivalents would be the creation and promotion of places in which subjects can develop (identity development as a link between processes of individuation and processes of integration) and the analysis of their conditionality in the space provided for that purpose. The issue of spatially sensitive educational promotion which is brought to light here would be brought closer to the imagined aims of municipal educational theory (cf. Richter 2008) and thus categorised: it "thus lies in forming and motivating various segments of a local, democratic public sphere as shared forums, both spatial and social. The municipality acts equally as an empirical basis, pedagogical medium and political perspective" (Richter and Coelen 2007, p. 228). Networks are meant to correspond to this multidimensional perspective and reproduce it through cooperation between professional actors and organisations. This attempt to create an equivalence is quickly declared a solution; the crux of the requirements of educational landscapes—though without reflection on the distinctly visible problems (cf. Maykus 2010, p. 318f.).

Educational landscapes do not break down the organisational rules of those participating in the network; the system must always be expected to have its limits.

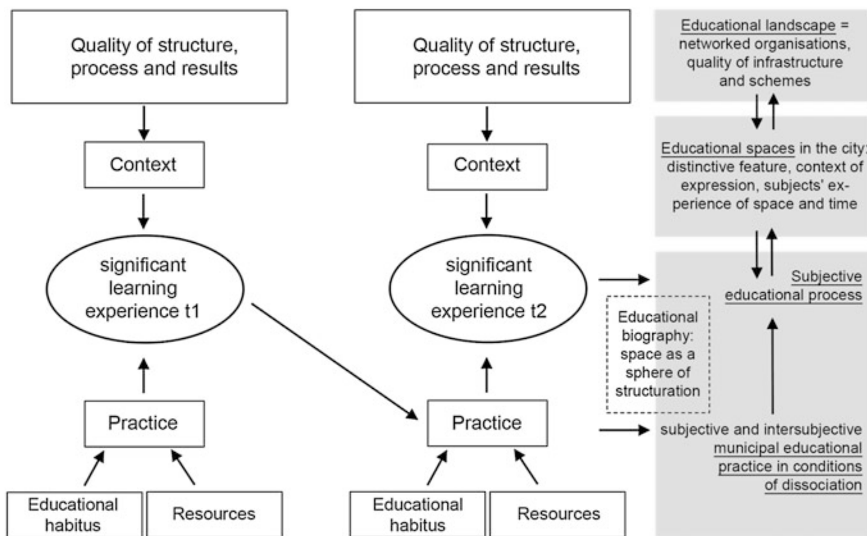

Fig. 2 A nuanced view of educational landscapes as a framework for significant spatial educational experiences: space as a sphere of structuration. *Source* adapted from Stecher (2012, p. 108), extended to include spatial education

Networks do not provide a set of regulations on a higher level which are adopted and practised by all those in the network. In fact, patterns of inclusion and mechanisms of exclusion are more likely to grow exponentially in a network, some conflicting with one another and being based on the functions of the system rather than on subjective situations of disadvantage and young people's needs for inclusion (cf. Maykus 2012, p. 35ff.). The developmental dilemma which plagues educational landscapes, as described in Chap. 2, thus always appears when networking is the only benchmark. A systemic perspective demonstrates that extensive networking is almost impossible, and that it is only of significance if it improves pedagogical work (and educational success). For this reason, the concept of the network should be viewed in a more nuanced manner, in that it is related to the conceptual nucleus of educational landscapes, and thus relativized to an operative medium.

From this point of view, the educational landscape represents an effort to improve the quality of educational infrastructures and schemes (generally: opportunities) in districts and municipalities; opportunities which, among other things, require contexts which people can experience. Such contexts might, for example, be experiences in school, during lessons and projects, full-service community education, resulting from the appropriation of social spaces, meetings which are open to all or being involved in clubs and cliques. A subjective educational process always takes place in the space which becomes established based on the respective educational habitus and available resources, and is influenced by generalised dimensions of dissociation. Thus, it is not only the space itself which needs to be analysed in terms of its effects on education (education as a component of the city); what mainly requires analysis is the spatially represented dimensions of dissociation (the city as a component of education). Together, the qualities of the contexts and subjective educational processes in conditions of dissociation in municipal space describe an overall model of "space as a sphere of structuration", and therefore the relationship between urban spaces and education: thus, they should also be the cornerstones of thought about educational landscapes (see Fig. 2). What does that mean, finally, about how educational conditions should be planned in city districts and municipalities, and what tasks should theorists tackle in future?

Practical and Theoretical Perspectives of Local Cooperation in New Educational Infrastructure

Without conducive conditions in the fields of practice, policy and administration, educational landscapes can hardly fulfil their potential: after all, they do not (yet) represent the much-demanded readjustments to the municipal systems of education, childcare and child raising (cf. Maykus 2014b). Accordingly, this chapter pleads for a change of perspective: practice should not rely on networking as an ideal, but should instead push for an understanding on education and what it

means to grow up “well”. Practical issues for the near future are: communication within public bodies, the fact that urban society is polycontextual, consciously pursuing lifeworld links within educational networks, appropriating topics and agreeing upon priorities (a municipal educational action plan as a participative and communicative process) and sensitising the programmes of local organisations to these issues. Practitioners flesh out the conceptual nucleus of the educational landscape—space as a sphere for structuration—with local experience, while theorists should concentrate on further narrowing down the conceptual nucleus favoured here. Finally, an exchange between theory and practice can help networked education refocus on relevance to the target group by guiding young people as they live in and experience educational places and spaces (cf. Faulstich and Faulstich-Wieland 2012): this can act as a gauge for municipal planning processes around education as a component of the city, and thus also for life in a city which is a component of education.

Bibliography

Bleckmann, P., & Durdel, A. (2009). Einführung: Lokale Bildungslandschaften – die zweifache Öffnung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 11–16). Wiesbaden: VS.

BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (Ed.). (2005). *Zwölfter Kinder- und Jugendbericht.* Berlin.

Emmerich, M. (2010). Regionalisierung und Schulentwicklung: Bildungsregionen als Modernisierungsansätze im Bildungssektor. In H. Altrichter & K. Maag Merki (Eds.), *Handbuch Neue Steuerung im Schulsystem* (pp. 355–375). Wiesbaden: VS.

Faulstich, P., & Faulstich-Wieland, H. (2012). Lebensräume und Lernorte. *Der pädagogische Blick, 20*(2), 104–115.

Habermas, J. (1999). *Strukturwandel der Öffentlichkeit.* Unveränderter Nachdruck (5th ed.). Frankfurt a. M.: Suhrkamp.

Habermas, J. (2013). *Im Sog der Technokratie. Kleine politische Schriften XII.* Frankfurt a. M: Suhrkamp.

Honneth, A. (2011). *Das Recht der Freiheit – Grundriss einer demokratischen Sittlichkeit*. Frankfurt a. M: Suhrkamp.

Knauer, R., & Sturzenhecker, B. (2005). Partizipation im Jugendalter. In B. Hafeneger, M. Jansen, & T. Niebling (Eds.), *Kinder- und Jugendpartiziaption im Spannungsfeld von Akteuren und Interessen* (pp. 63–94). Opladen: Barbara Budrich.

Löw, M. (2001). *Raumsoziologie*. Frankfurt a. M: Suhrkamp.

Maykus, S. (2010). Von der Programmatik zur Praxis: Was können kommunale Bildungsnetzwerke leisten? *Zentralblatt für Kindschaftsrecht und Jugendhilfe 9*, 313–322.

Maykus, S. (2011). *Kooperation als Kontinuum. Erweiterte Perspektive einer schulbezogenen Kinder- und Jugendhilfe*. Wiesbaden: VS.

Maykus, S. (2012). *Bildungslandschaften.* In Online-Enzyklopädie Erziehungswissenschaft des BeltzJuventa Verlages. http://www.erzwissonline.de. Accessed 18 Oct 2014.

Maykus, S. (2014a). Inklusive Kommune oder kommunale Inklusion? Theoretische Reflexionen und ein Ordnungsversuch raumbezogener Perspektiven von Inklusion. In G. Hensen, B. Küstermann, S. Maykus, A. Riecken, H. Schinnenburg & S. Wiedebusch (Eds.), *Inklusive Bildung. Organisations- und professionsbezogene Aspekte eines sozialen Programms* (pp. 279–317). Weinheim, Basel: BeltzJuventa.

Maykus, S. (2014b): Inklusive Bildung als vernetzte Bildung. Kommunale Bildungslandschaften zwischen Schule und Kinder- und Jugendhilfe als förderliche Rahmenbedingung für Inklusion? In S. Kroworsch (Ed.), *Inklusion im deutschen Schulsystem. Barrieren und Lösungswege* (pp. 160–171). Freiburg im Breisgau: Lambertus.

Müller, B. (2011). *Empirische Identitätsforschung. Personale, soziale und kulturelle Dimensionen der Selbstverortung*. Wiesbaden: VS.

Nassehi, A. (2011). *Gesellschaft der Gegenwarten. Studien zur Theorie der modernen Gesellschaft*. Frankfurt a. M: Suhrkamp.

Richter, H. (2008). Kommunalpädagogik. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe der Ganztagsbildung* (pp. 868–877). Wiesbaden: VS.

Richter, H., & Coelen, T. (2007). Kommunale Identitätsbildung. Von der (Re-) Sozialisierung des Territorialen. In F. Kessl & H.-U. Otto (Eds.), *Territorialisierung des Sozialen. Regieren über soziale Nahräume* (pp. 215–231). Opladen: Barbara Budrich.

Stecher, L. (2012). Eckpunkte zur konzeptionellen Beschreibung organisationeller und lebensweltlicher Bildungsprozesse in der Jugendphase. In J. Ecarius & M. Eulenbach (Eds.), *Jugend und Differenz* (pp. 107–126). Wiesbaden: VS.

Sturzenhecker, B. (2013). Demokratiebildung in der offenen Kinder- und Jugendarbeit. In U. Deinet & B. Sturzenhecker (eds.), *Handbuch Offene Kinder- und Jugendarbeit* (pp. 325–337) (4th fully reworked ed.). Wiesbaden: VS.

Walther, A. (2010). Partizipation oder Nicht-Partizipation? Sozialpädagogische Vergewisserung eines scheinbar eindeutigen Konzepts zwischen Demokratie, sozialer Integration und Bildung. *neue praxis 2*, 115–134.

Towards a Social Pedagogy of Urban Design

Sven De Visscher and Hari Sacré

Abstract The social and cultural position of children in the city is largely influenced by urban design logics. Urban designers have a social pedagogical role when they design spaces for children in the city. We discuss three clusters of childhood constructions that affect current prescriptive ideas on the perfect child in the perfect city: the private, the autonomous and the public child. The aim is to focus on the particular interrelations between these constructions, pedagogical theories and perspectives on design. In conclusion, we will suggest an approach to design as a collective learning process, in which children are addressed as political subjects and fellow citizens who take part in this collective research and negotiation process with other citizens about possible future scenarios for urban spaces.

Keywords Social pedagogy · Urban design · Research by design · Community development · Citizenship

Space matters in pedagogy. Not only as the context of pedagogical provisions or activities, but also as an educator in itself with diverse pedagogical assumptions and agendas that shape societal relations (De Visscher and Bouverne-De Bie 2008; De Visscher et al. 2012). The social and cultural position of children and young people in the city is largely influenced by design logics. As such, it is reasonable to state that urban designers have a pedagogical role, even when they are not referring to any intentional pedagogical program or theory. In many cases, however, particular views on childhood and pedagogy do underlie the spatial design of children's lifeworlds. Throughout the 20th century, the content of this prescriptive perspective

S. De Visscher (✉) · H. Sacré
Department of Social Work, Urban Education Research Group,
University College Ghent, Valentin Vaerwyckweg 1, 9000 Ghent, Belgium
e-mail: sven.devisscher@hogent.be

H. Sacré
e-mail: hari.sacre@hogent.be

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evolved from the urban playground movement (as far back as the early 19th century) to the play-inclusive design of public spaces and—more recently—child-friendly and child-oriented design guidelines (De Visscher and Bouverne-De Bie 2008; De Visscher 2014). They all share the assumption that the child as well as society can be engineered and controlled from outside. Each of these models starts out from an implicit or explicit view of the perfect child in the perfect city.

However, the pedagogical question that we want to address in this contribution is: who is the child in all these design theories and to what kind of pedagogy does or should urban design contribute? History shows that our current discussion about 'the child'—and the most dominant design ideas for places for children in the city that derive from that—entail different views on childhood. We will discuss three clusters of childhood constructions: the private, the autonomous and the public child. The aim is not to present a comprehensive overview of Twentieth century childhood constructions, which can be found in other publications (e.g. James and Prout 1997; Cunningham 2005), but to focus on the particular interrelations between these constructions, pedagogical theories and perspectives on design.

The Private Child

A first cluster of childhood constructions refers to the child as an individual being that belongs to the private sphere of the family. The publication of Ellen Key's *The Century of the Child* in 1900 clearly characterized the Romantic image of the child that was constructed in that time. The child appeared as a 'pure', 'divine' creature. 'Original innocence' is the basic trait of the Romantic view on childhood. This innocence is expected to be safeguarded until adulthood and protected against malicious societal influences. More recently, the Romantic view on childhood has been complemented by other approaches that fit in with the focus on the private child. Zelizer (1985) showed, for example, how in recent decades the affective-emotional value of children has increased enormously, whereas their utilitarian-economic value has decreased or even disappeared. Children have become a scarce and emotionally valuable resource within families. As a consequence she observed a strong sentimentalization of the child and of childhood, resulting in a more protective attitude towards children.

The focus here is on the personal development of the child from a psychomedical point of view. The dominant psychomedical approach to childhood departs from an *average* or *normal* development, and therefore risks ignoring diversity between children, as well as the diversity of broader contexts in which education and socialization take place. The perfect child is represented in these development models as the child who has acquired all the necessary skills, dispositions, knowledge, values and competences that are prescribed in the model. Designers can contribute to this ideal by designing spaces for children that contribute to their developmental tasks and by creating safe environments outside of adult society where children can explore and discover the world. The Romantic ideal of

childhood has dominated a view on the perfect pedagogical environment as being a rural, natural, 'anti-urban' environment (James and Prout 1997). Jean-Jacques Rousseau (1817) had a great influence on modern pedagogical thinking by making a distinction between nature and society within the child's education. According to Rousseau, nature is the regulating principle to which all education should be oriented. The primary concern of the educator should be to keep the child far from the degeneration of culture that disturbs its natural development (Depaepe 2000). In this perspective urban public space has become a *big bad wolf* (as in the fairy tale of Little Red Riding Hood), representing a known but unpredictable threat in the outdoor world against which children should be warned and prepared (De Visscher 2008). The streets have become a symbol of the potential threat posed to the safety and integrity of vulnerable children by so-called stranger-danger, heavy traffic and accidents, and ecological risks. This big bad wolf syndrome has resulted in the design of playgrounds as separate, safe islands in the city. The idea that play is a universal and timeless characteristic of childhood—and the planning of spaces for children—is very strong (Hewes 2007). The critique on this Romantic image of the playing child does not question the assumption that children like to play, but rather the fact that play can have different meanings for the child, and that children's play cannot be isolated from the broader social, cultural and political context that circumscribes play. Play is a cultural element (Huizinga 1971). The space in which play takes place and where the rules of play are defined is socially and culturally constructed.

In this perspective children take a marginal position in design processes, *as we all know what children want*. Children whose situation deviates from the (middle class) norm or who participate in urban space in *alternative ways* are at particular risk of being excluded or being seen as a problem. This translates into a very ambiguous attitude towards children's presence in urban space, pulling some groups of children away from the indoors to the streets (because it benefits their development), and pushing other groups (who do not fit the image of the perfect child) away from the streets into structured, pedagogical settings such as youth work.

The Autonomous Child

Paradoxically, individual pedagogy—based on protection and the design of separate spaces for children in society—resulted in a construction of childhood as an autonomous category, isolated from and even opposed to adults. The original goal behind the segregation of children's lifeworlds (to temporarily dismiss them from public responsibilities and duties in order to safely prepare them for their future adulthood) gradually shifted into the institutionalization of childhood as a separate life stage. This political exclusion from mainstream adult society was compensated for by allowing children more independence and agency on the sociocultural level. Protection as a pedagogical goal was complemented by empowerment and

emancipation, allowing and encouraging children and young people to create their own networks, cultures and activities. The childhood period has become a time to build different forms of social and cultural capital among peers. This has resulted in the paradoxical situation where children are allowed more sociocultural freedom (e.g. in terms of consumption), while at the same time staying economically dependent on their parents increasingly longer. As a result, children have become a primary market for the consumer society, and furthermore the commodification of childhood resulted in the design of commercial spaces for children in the city (McKendrick et al. 2000). The growth of commercial playgrounds is an example of this development, as is the growing Disneyfication of the design of spaces for children (Mannion and I'Anson 2004). The commercial image of the child (white, middle class, independent, smart and happy) is taken as a standard. These more emancipatory perspectives on the child also affected views on urban design. Participatory approaches to urban design were introduced that gave children a voice (for example: in the choice of materials, attributes and functions of a particular place). Exploring what children want gradually became an extra stage in the design process. The traditional playground approach was further supplemented by a growing focus on children's perspectives on the play value of streets and various other elements found in public space. Imagination and creativity are presented as being characteristic of how children see and experience public spaces. Many studies within this approach (e.g. Rasmussen and Smidt 2003; Burke 2005) concluded that informal play spaces (generated by children themselves) are often more appealing to children than the designed and formal playgrounds.

The Public Child

The attention paid to children's "own" lifeworlds and perspectives resulted in the development of a sociology of childhood (Honig 1999), aiming to contribute to a set of approaches that start out not from the child as part of the private sphere, but from the child as a member of a broader society and his/her position as a (future) citizen. Children are theorized as social agents, and childhood as a social, cultural and historical construction. Furthermore, children's socialization is seen as an interactive process instead of a one-directional, individual process in which the child is introduced into the mainstream (adult) society (James and Prout 1997). Socialization is not a matter of teaching children how to act and behave in their future social life, but is a collective learning process of all members within society that children equally contribute to through their own everyday social actions. Biesta (2014) suggests making a distinction between a socialization conception of this learning process, which is about the learning necessary to become part of an existing socio-political order, and a subjectification conception, which focuses on the child 'coming into presence' as a unique person, and as a unique citizen within current society. Whereas a socialization conception of civic learning is about

learning *for future citizenship*, the subjectification conception of civic learning is about learning *from current citizenship*.

Positioning children in the public sphere raises questions about their position as fellow citizens. Biesta (2014) stresses the difference between social and political dimensions of citizenship. The social dimensions of citizenship focus on how children are able and allowed to participate in different social networks and social practices within the community. It is mainly about being part of society. The political dimensions of citizenship pay attention to children's potential to influence political decision-making within society. Thus the social participation opportunities (that were already granted to the autonomous child) are complemented with political participation rights, which include the right to have a voice and be heard within the socio-political debate. Applied to the city, Lefebvre (1968) states that the recognition and promotion of the urban citizenship of marginalized groups requires on the one hand equal opportunities of appropriation and use of urban public space, and on the other hand equal opportunities for the production of urban public space (Bezmez 2013). Both strategies are summarized as promoting every citizen's right to the city. This means that all groups within the city (including different groups of children) should be able to find and appropriate physical and mental spaces within the city that they can identify with and that enable different social and cultural relations and modes of expression. Next to that, it also requires that different groups within the city should be able to influence the further planning and production of urban space.

Towards a Social Pedagogy of Urban Design

The notion of the public child opens up different perspectives on the social pedagogical role of the designer—by connecting pedagogical interventions to a social and political dimension. From a historical point of view, social pedagogy came into existence as a reaction to the new kinds of social problems and increasing social needs caused by industrialization and the breakdown of social order (Hämäläinen 2012). Hence the fundamental social pedagogical question is if and how social problems should be translated into pedagogical questions, and whether this is an accurate translation seen from the perspective of the most marginalized groups in society (Coussée and Verschelden 2014).

As such, a social pedagogical perspective on urban design includes a double shift of perspectives. First, it moves away from an abstract image of the perfect child in the perfect city towards a pedagogy that builds on existing ways of living (together) in particular urban environments and the social problems that derive from them. In this respect, the community is no longer merely subject to urban design, but more and more its undeniable creator. Urban design should build on the existing problem definitions derived from the everyday practices of citizens (including children) and take these as the starting point of a collective learning process. Second, the social pedagogical perspective shifts the categorical focus on children

towards a spatial focus on shared urban spaces. Reading urban space in fact means studying the dialectic relation between the built environment and sociocultural practices that arise in it (Gehl 2010). As a result of this spatial turn, the role of children in urban design should be redefined as that of political agents who co-construct the city.

Urban Design as a Collective Learning Process

From a social pedagogical perspective, urban design should constantly move between the city as-it-is and as-it-could-be. Reading the city as it is means studying the dialectic relation between the built environment and sociocultural practices that arise in it (Gehl 2010). Against the obvious idea of urban designers reading the city from above, de Certeau promotes a bottom-up perspective focusing on the everyday practices of urban dwellers. These ordinary practitioners of urban space are walkers, whose bodies follow the thicks and thins of an urban 'text' they write without being able to read it (de Certeau 1984). Hence, de Certeau speaks of two positions or realities: the position of the urban designer and the reality of the urban dwellers. The position of the urban designer is representing geographical or geometrical space. Designing strategies to structure city life, urban designers tend to see urban space as a static and frozen entity. Living in this urban space, the position of urban dwellers refers to another spatiality, in which sociocultural practices are produced as tactics to deal with these abstract strategies in their everyday lives. Urban projects often take only one position into account, which implies they will only grasp a fragmented notion of urban space. In fact, the two realities do not exist separately, but meet and modify each other in *lived space*. Therein, sociocultural processes are subject to the urban environment. On the one hand transformations in the built environment will change sociocultural processes in between, on the other hand sociocultural processes transform places into spaces, and sequentially produce space (Lefebvre 1974).

Because meaning in this lived space is complex and layered, de Certeau suggests a dialogue about the existing complexity of urban space before redesigning it. In that sense, urban designers cannot position themselves outside the community, as their aim to redesign this lived space makes them a part of it. According to Wolfrum (2013), de Certeau's arguments are nowadays rediscovered by the movement Performative Urbanism, as they focus on the staging of inherent potentials in urban transformation processes, and therefore stimulate a dialogue between urban designers and urban dwellers.

From a social pedagogical perspective, this dialogue should focus on the differences between functionalities and possibilities of urban spaces. Defining urban space within the framework of institutional structures, designers regularly determine its use and function. In this regard, public space is, for example, predetermined as being public, instead of becoming public through a multiplicity of citizens' actions, relations and performances (Hawkins 2013). Urban dwellers, on

the other hand, overwrite these urban spaces with sociocultural practices and thereby question the functionality of spaces. In this regard, reading the city should be understood as a collective process to see new possibilities of existing spaces in the city.

Research-by-design as a Forum

The field of research-by-design creates opportunities for designers to create a forum where collective learning moments can take place, and in which the design process is seen as a way of investigating and producing knowledge that is exploratory rather than solution-driven. It involves an iterative process of analysis and design. Sequential alternative designs form the basis for a collective research and negotiation process with citizens about possible future scenarios for a certain (contested) space. During this exploratory process, the political dissensus and negotiations among the participants about desired and undesired ways of living together in the city are more important than the final plan, turning the process into a form of community development. Multiple means of participation can be elaborated for involving the community in general (and children in particular) to co-produce urban space (Spencer and Blades 2006). When it comes to children in such projects, urban spaces on which they could formulate their opinion are often demarcated (such as playing areas or schools). Furthermore, projects regularly start from the question of what children *want* instead of what they—as fellow citizens—think their neighborhood or city *needs*. As fellow citizens, children do not merely interact with peers in urban spaces, but with the bigger community. Therefore, it is odd to imagine children's voice being restricted to certain policy domains or urban spaces, which throws into question the pedagogical role of the urban designer. Is it just about designing playing areas and schools, or is it about coproducing the bigger city?

Moving from a social towards a political understanding of citizenship, research-by-design has (to a certain extent) the potential to equalize the power inequalities within the community and to address children not as an age group but as competent political subjects. As both adults and children are entangled in the perception and production of a common urban space, research-by-design does not distinguish children from adults as it operates primarily with the community. In this way, a social question about children's position in the city is turned into a pedagogical challenge for urban design. Designers have a social pedagogical role, which turns the negotiation process in research-by-design into a dialogue about pedagogical values. This dialogue enables citizens and urban designers to read the same urban space in multiple ways. According to Jacques Derrida, this process of reading the city by *deconstructing* it has emancipatory force as it reveals new, previously hidden possibilities (Wolfreys 1998).

Bibliography

Bezmez, D. (2013). Urban citizenship, the right to the city and politics of disability in Istanbul. *International Journal of Urban and Regional Research, 37*(1), 93–114.

Biesta, G. (2014). Learning in public places: Civic learning for the twenty-first century. In G. Biesta, M. De Bie, & D. Wildemeersch (Eds.), *Civic learning, democratic citizenship and the public sphere* (pp. 1–11). Dordrecht: Springer.

Burke, C. (2005). Play in focus: Children researching their own spaces and places for play. *Children, Youth and Environments, 15*(1), 27–53.

Coussée, F., & Verschelden, G. (2014). Social-cultural education in Flanders: Social pedagogical history. In J. Kornbeck & N. Rosendal Jensen (Eds.), *Social pedagogy for the entire lifespan* (pp. 102–121). Bremen: Europaeischer Hochschulverlag.

Cunningham, H. (2005). *Children and childhood in western society since 1500*. Harlow UK: Pearson Longman.

De Certeau, M. (1984). *The practice of everyday life*. Berkeley: University of California Press.

De Visscher, S. (2008). *De sociaal-pedagogische betekenis van de woonomgeving voor kinderen*. Gent: Academia Press.

De Visscher, S. (2014). Mapping children's presence in the neighbourhood. In G. Biesta, M. De Bie, & D. Wildemeersch (Eds.), *Civic learning, democratic citizenship and the public sphere* (pp. 73–90). Dordrecht: Springer.

De Visscher, S., & Bouverne-De Bie, M. (2008). Recognising urban public space as a co-educator: children's socialization in Ghent. *International Journal of Urban and Regional Research, 32* (3), 604–616.

De Visscher, S., Bouverne-De Bie, M., & Verschelden, G. (2012). Urban public space and the construction of social life: a social-pedagogical perspective. *International Journal of Lifelong Education, 31*(1), 97–110.

Depaepe, M. (2000). *De pedagogisering achterna: aanzet tot een genealogie van de pedagogische mentaliteit in de voorbije 250 jaar*. Leuven: Acco.

Gehl, J. (2010). *Cities for people*. Washinton DC: Island Press.

Hämäläinen, J. (2012). Developmental psychology, youth sociology and social pedagogy. Three perspectives on youth work and youth work policy. In F. Coussée, H. Williamson, & G. Verschelden (Eds.), *The history of youth work in Europe. Relevance for today's youth work policy. Vol. 3* (pp. 93–104). Strasbourg: Council of Europe Publishing.

Hawkins, H. (2013). Geography and art. An expanding field: site, the body and practice. *Human Geography, 37*(1), 52–71.

Hewes, J. (2007). The value of play in early learning: towards a pedagogy. In T. Jambor & J. Van Gils (Eds.), *Several perspectives on children's play* (pp. 119–145). Antwerpen: Garant.

Honig, M.-S. (1999). *Entwurf einer Theorie der Kindheit*. Frankfurt a. M: Suhrkamp.

Huizinga, J. (1971). *Homo ludens. A study of the play element in culture*. Boston: Beacon Press.

James, A., & Prout, A. (Eds.). (1997). *Constructing and reconstructing childhood*. London: FalmerPress.

Key, E. (1900). *Barnets a rhundrade*. Stockholm.

Lefebvre, H. (1968). *Le droit à la ville*. Paris: Anthropos.

Lefebvre, H. (1974). *La production de l'espace*. Paris: Anthropos.

Mannion, G., & I'Anson, J. (2004). Beyond the Disneyesque. Children's participation, spatiality and adult-child relations. *Childhood, 11*(3), 303–318.

McKendrick, J., Bradford, M. G., & Fielder, A. (2000). Kid customer? Commercialization of playspace and the commodification of childhood. *Childhood, 7*(3), 295–314.

Rasmussen, K., & Smidt, S. (2003). Children in the neighbourhood: The neighbourhood in the children. In P. Christensen & M. O'Brien (Eds.), *Children in the city: Home, neighbourhood and community* (pp. 82–100). London: Routledge.

Rousseau, J. J. (1817). *Emile ou de l'éducation*. Paris: Didot.

Spencer, C., & Blades, M. (2006). *Children and their environments: Learning, using and designing spaces*. Cambridge: Cambridge University Press.

Wolfreys, J. (1998). *Deconstruction, Derrida*. New York: St Martin's Press.

Wolfrum, S. (2013). *Urbane Architektur_performative urbanism*. http://www.iba-hamburg.de/fileadmin/Erleben_2013/Kongresse/Stadt_Neu_Bauen/SNB_Wolfrum.pdf. Accessed: 12 June 2014.

Zelizer, V. A. (1985). *Pricing the priceless child. The changing social value of children*. New York: Basic Books.

Educational Landscapes and the Reduction of Socio-spatial Educational Inequality in the City

Thomas Olk

Abstract This chapter deals with the question of whether, and in what conditions, a strategy for a municipal educational landscape can play a role in reducing segregation and educational inequality within social spaces. It starts out from findings gained through urban and regional research showing that processes of ethnic, social and demographic segregation have a negative effect on the educational opportunities of children in socially disadvantaged living areas. The author analyses the strategic approaches, instruments and institutional innovations with which the cities of Mannheim and Nuremberg, selected as examples, are attempting to improve the educational situation in specific urban districts.

Keywords Disadvantaged urban districts/neighbourhoods · Segregation · Educational inequality · School · Educational landscapes · Neighbourhood development

The term "regional/municipal/local educational landscapes" addresses conceptual debates and actual developments signalising the increased value placed on the spatial dimension in education as a field of action. One key focus is on developing appropriate strategies within education policy to counter tendencies for children and young people's educational and developmental opportunities to polarise in different social spaces, especially in larger towns and cities. Thus, for some time now, empirical urban and regional research has seen the emergence of socially disadvantaged urban districts characterised by the cumulation of various sets of problems (e.g. cf. Neu et al. 2011). Ethnical, social and demographic processes of segregation lead to districts with a large number of inhabitants of immigrant origin, above-average poverty, childhood poverty and unemployment figures, and a population with a large proportion of children and young people, contrasting with districts with the opposite characteristics. This polarisation of contextual conditions

T. Olk (✉)
Martin-Luther-Universität Halle-Wittenberg, Franckeplatz 1,
Haus 6, 06099 Halle/Saale, Germany
e-mail: thomas.olk@paedagogik.uni-halle.de

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by social space affects people's educational opportunities: the proportion of children measured as overweight at school entry medical examinations, and the percentage of children whose school entry is delayed, are above average in socially troubled districts, and the number transferring to the higher *Gymnasium* level of secondary education is considerably lower.

While developing programmes for municipal educational landscapes, some cities have thus started to make city-wide efforts to develop instruments specific to each social space, countering these processes by which unequal educational opportunities become established in social spaces. An empirical research project was carried out to discover what strategic approaches, instruments and institutional innovations this involves, and what effect they have; the following shall set out some selected findings from that project. First, the research design and the issues addressed by the project are presented. Then a comparison of the approaches used in two cities studied will be used to answer questions about strategic solutions to segregation processes in certain social spaces and their effects. Finally, there will be a preliminary summary.

The Project "Educational Governance—Municipal Educational Landscapes"

The research project "Educational governance—municipal educational landscapes"[1] investigated the process of setting up municipal educational landscapes in urban social spaces in three West German cities. The methodological procedure was a mixture of expert interviews, participant observation and socio-spatial education monitoring.[2]

The theoretical framework for this was the governance approach, used in political science (cf. Benz et al. 2007). The term "governance" refers to all forms of regulation and coordinative mechanisms between actors with some amount of autonomy, coming from different social sectors and fields of action, and whose actions affect each other. To that extent, this perspective widens the view from that of one or a few privileged controlling actors (the state, municipal policy) to include a larger spectrum of potential players, i.e. those previously seen (e.g. in the field of education policy) as marginal or having little influence (actors from industry and civil society, for instance).

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[1]The project was based at the Institute of Pedagogy, Martin Luther University, Halle-Wittenberg, and funded by vhw e.V., the Federal Association for Housing and Urban Development (03/2010 to 08/2013). The project was led by Prof. Dr. Thomas Olk, and the team of academics included Thomas Stimpel, Ivanka Somborski and Constanze Woide.

[2]To gather information on the social and educational contextual conditions in the districts investigated, the project also developed a special instrument for socio-spatial monitoring (e.g. on education), then tested it out using the statistical data provided by the relevant city institutions.

The initial problem when developing strategies for educational landscapes to counter the consequences of social and ethnic segregation processes is that the sets of problems identified are interwoven across "borders" (cf. Kussau and Brüsemeister 2007, p. 31ff.). Although, as the different functions have been allocated, there has been a process of separating work responsibilities by hierarchical level and horizontal connections (specialised departments), the problems to be tackled—and thus the problem-solving strategies required—are interdependent, meaning that decisions and action taken need to be coordinated between different hierarchical and horizontal levels. This is also the case for the problems which are of interest here. When tackling the results of segregation processes in social spaces, issues related to the education (and educational networking) of the different actors in the social space cannot be viewed in isolation from urban planning processes related to the neighbourhood as a place where young people and their families live and are housed. After all, the socio-spatial conditions and structures which dominate in a district also determine the neighbourhood's quality as an educational space, and thus the contextual conditions for young people's processes of education and development (cf. Mack 2008). On the research project, education-related strategies were thus analysed not just as departmental policy (e.g. in a municipality), but also, above all, as the object of cooperation between municipal education policy (in an extended sense) and developmental policy for a city or city district. Accordingly, the principle research question can be formulated as follows: How, and to what extent, can municipalities succeed in linking the education policy targets around the development of municipal educational landscapes to specific regulatory forms, committees and measures for networking (etc.) in a way that actually allows the education-related contributions made by the different actors and settings in the multi-level system of the city to be systematically integrated, improving educational outcomes?

The investigation studied three cities (Mannheim, Karlsruhe and Nuremberg) which had all, prior to the start of the research project, started not only to introduce ambitious educational targets on a city-wide basis but also to develop and test instruments and institutional innovations on subsections of the city, to tackle the consequences of socio-spatial segregation processes.

Strategies and Instruments to Tackle Socio-spatial Educational Inequality

In the following, the case examples of Mannheim and Nuremberg will be investigated to discover the means used by actors with political and administrative responsibility to combat the polarisation of educational opportunities and the threat of exclusion facing young people living in socially disadvantaged districts. It is no coincidence that these two cities see a need to take action on this. Increased need for action can be identified both in the district of Neckarstadt-West and in "West Nuremberg". These two districts are social spaces with many social problems (indicated by the above-average proportion of inhabitants of immigrant origin, the high proportion of children receiving social benefits, the high unemployment rate, etc.).

The Project "One Square Kilometre of Education—Education in the Grid"

The key project set up by the city of Mannheim in the district of Neckarstadt-West is planned to last ten years and named "One square kilometre of education—education in the grid", referring to the grid-like street pattern in the area. Since September 2009 this has been trying to improve the educational success of disadvantaged children and young people in the district. The project is jointly run by the city of Mannheim and the Freudenberg Foundation in Weinheim. Its focus on the social space of a primary school district is intended to help develop a networking strategy supporting individuals' biographies and centring on one of the two primary schools in the district. The establishment of this project is linked to three strategic aims:

- improving the educational opportunities of the children and young people living in this district by means of a culture of learning and encouragement which supports individual biographies and involves various institutions,
- potentially mobilising all educationally relevant actors in the district,
- testing out the model project with the aim of transferring the knowledge gained to other districts if it is a success.

As the driving force behind the networking strategy, a "pedagogical workshop" was set up to provide coordination and support on the project (cf. Stadt Mannheim 2013, p. 172). The central fields of action are: encouraging network structures to be set up and extended between the actors, supporting the development of day-care centres and schools, and improving processes for the transition from kindergarten to school and cooperation with parents (ibid.). Another task consists in encouraging actors in education from different fields of action and sectors to network on the level of the social space (cf. Jahre and Werner 2011, p. 281). Moreover, the success of the project is being assessed using academic process evaluation (cf. Dickhäuser and Gronki-Jost 2012).

"West Nuremberg Landscape for Learning and Education" Working Group in the Weststadt District Team

"West Nuremberg" is a social space characterised by huge industrial wasteland sites (AEG, Quelle etc.) which is in the process of post-industrial structural change. To achieve the interdepartmental management and coordination of strategies which this requires, based on policy on economics, district development and education, in 2008 the City Planning Office took charge of a "Weststadt district team" involving almost every municipal department and acting as a means of implementing strategies for integrated urban and district development, an intermediary between the strategic and operative levels. This district team is intended to coordinate district

development and initiate approaches for development and participation, as well as inspiring projects. On this district team, representatives from the educationally relevant business areas of schools, young people, culture and social and family issues take on responsibility for developing the "West Nuremberg landscape for learning and education", thus acting as the driving forces behind the process of local education-related development. Interviews with experts identified the key tasks of this informal working group as getting to know networking structures, establishing needs, controlling resources for support in line with needs, supporting actors and mediating between different (hierarchical) levels of urban policy. The 2012 integrated urban development plan (INSEK) for Weststadt also emphasises the fields of education and learning as prominent elements in the process of urban development, naming strategic projects for improving the educational infrastructure in "West Nuremberg" in terms of construction and content. "Strategic projects" are to be used as a basis upon which networks can develop among educationally relevant institutions, and provisions and services can be agreed upon and coordinated together.

In addition, also in 2008, two district coordination centres were set up for the area investigated, based at the department for Young People, Families and Social Affairs (run by the office for social space development). The central tasks of the district coordination centres are local networking, increasing district communication, and mobilising additional support for the district (e.g. by gaining corporate sponsors, creating opportunities and occasions for district meetings and developing spots to support and act as an anchor for local residents). The content does not focus on the usual tasks of district management; instead, the central target group is the district's children and young people, and the subject is extending the local educational infrastructure.

Effects of Innovation (E.G. by Institutions) on the District Level

As outlined, the project "A square kilometre of education" offers an approach which accompanies people's biographies by helping develop a conveyor-belt process "from the start" which relates to such biographies. This is not about all the children in the entire district of Neckarstadt-West, but only about the children who live in the catchment area of the primary school at the heart of the network's development. The biographical link is thus systematically connected to the link to a formal education institution. The network arising from this construction has two biases. Firstly, in this kind of school-related network, formal institutions are preferred as network partners. The (limited) quality of education in the social space of Neckarstadt-West can thus only be taken into account as such if a formal actor picks up on the matter. However, that is unlikely in view of the second bias: the implicit preference for network partners which define themselves as relevant to processes of

scholastic education. Our findings in the context of qualitative network analysis show, in any case, that as the network develops around the primary school investigated, intensive cooperation occurs the most among those partners in the network which are in some way seen as relevant to scholastic education processes, either by themselves or by others. Apart from daycare centres, these particularly include institutions offering language support, homework tutoring or special music classes (for details see Olk and Somborski 2013).

The links among actors of this kind in the district which provide relevant support for children at this primary school constantly grow denser while all other actors—ones which may also be educationally relevant—tend to drop out of the network's range of vision. Accordingly, the qualitative interviews with relevant actors working with young people, in social care, culture and migration show that though these actors are aware of the project, they only have loose ties to the main actors on the project as they do not always see themselves as relevant to scholastic education. This means that the educational potential of the institutions and actors which tend to provide non-formal and informal education is not put to optimal use within this pilot project. Another consequence of this selective recruitment of network partners is that the project cannot meet expectations that, alongside its core task, it will also mobilise the district.

The "West Nuremberg learning and educational landscape" working group in the Weststadt district team, and the district coordination centre, also made it their aim to create more links between the educationally relevant actors in the Nuremberg West, thus allowing the educational activities offered by individual institutions to be coordinated better. As a result, network structures can be identified in both districts which consist of a combination of some networks working towards a particular target and others which do not. The non-targeted socio-spatial networks include the central district working groups in Gostenhof-Ost, Gostenhof-West and Muggenhof. These district working groups include all actors of relevance to the district. The targeted networks include the "School support working group" in Gostenhof and small-scale cooperative associations made up of schools, crèches and day-care centres. In addition to this there is also a "West Nuremberg" working group combining crèches, primary schools and day-care centres.

Though the actors involved are basically extremely satisfied with these forms of socio-spatial networking, the district actors do see some need for further development. Thus, those interviewed believe that the district working groups should mainly be for sharing information and experience, and are a platform for developing smaller initiatives and projects. In their opinion, however, there needs to be more development of "small-scale networks" among institutions, e.g. between kindergartens, primary schools and after-school day-care centres, or linking secondary schools with important educational partners in their surroundings. To that extent, some of those interviewed identified considerable need for development with regard to opening up secondary schools to the district. However, these actors also pointed out that in view of the professionals' heavy workload and the high transaction costs related to developing and maintaining cooperative relationships, there is a need (see also Niemann in this volume) for supportive structures and additional resources (on

the problem of maintaining cooperation see also Stolz 2013). A look at the "strategic projects" in INSEK 2012 also clearly reveals that, in terms of content, progress within cooperative relationships has so far relied far too strongly on the initiative of committed individuals (such as school directors), as there is a lack of reliable supportive structures and resources. Moreover, according to the experts interviewed, when schools work with external partners, the ideas and interests of the school still dominate, meaning that some partners on cooperative projects still feel more like service providers rather than partners.

Summary

This chapter looked into the question of whether (and in what conditions) a municipal strategy for educational landscapes can play a part in reducing segregation and socio-spatial educational inequality. This was investigated using the specific procedures and innovative institutional measures in the cities studied: Mannheim and Nuremberg.

Very generally, the question can be asked of how the cities dealt with the problem of intersectoral coordination on the conceptual level. In this respect it can be seen that, even on the conceptual level, the project "One square kilometre of education" in Mannheim is already a sectoral approach, focusing exclusively on improving the educational situation of a certain part of the district's pupil population. The project is not a comprehensive response to the particular social, ethnic and educational characteristics of the district, and indeed the systematic aims of the project do not include improving or developing those characteristics. In other words, issues around developing urban planning and education in Neckarstadt-West are not conceptually related to one another. By contrast, the procedure used in West Nuremberg is an integrated approach which involves seeing interaction between district development and education from the conceptual level on, and creating an intersectoral development strategy on that basis. In both cities, the selection of instruments and institutional innovations is part of a systematic context of setting priorities for the city as a whole. Thus, even on a citywide level, Mannheim is a best-practice example of "joined-up" municipal education policy, with structural decisions, planning instruments and management strategies for district developments being put together in the overall context of citywide education department policy. By contrast, the development of a local learning and educational landscape in Nuremberg is an important element of urban/district development strategy for West Nuremberg. This systematically links the concept of the educational landscape with the socio-spatial perspective, seeing both the contexts and solutions to problems as locally dependent. This link is maintained at the point where the strategic and operative levels meet. The West Nuremberg district team was established as an interdepartmental platform for interdisciplinary exchange and the development of complementary strategies basically allowing the process to be coordinated at every stage of implementation. By contrast, the project "One square

kilometre of education" is part of the City of Mannheim's hierarchical educational department, with no systematic links to the urban development department.

On the level of connecting educationally relevant actors and institutions in the district, the strengths and weaknesses of the two case examples complement one another. The institutionally centred networking approach in Mannheim, focusing on a primary school and accompanying people's biographies, facilitates the leap from mere networking to better-coordinated educational programmes (if at the cost of narrowing down its sphere of influence). The socio-spatial West Nuremberg approach, meanwhile, initially prioritises networks without a single focus, which are then expected to produce smaller networks for specific tasks. Though task-related networks of this kind have indeed developed, they are still "islands" within a fragmented educational landscape in West Nuremberg.

Bibliography

Benz, A., Lütz, S., Schimank, U., & Simonis, G. (Eds.). (2007). *Handbuch Governance. Theoretische Grundlagen und empirische Anwendungsfelder*. Wiesbaden: VS.

Dickhäuser, O., & Gronki-Jost, E. (2012). *Evaluation des Förderansatzes "Ein Quadratkilometer Bildung– Bildung im Quadrat". Zwischenbericht der wissenschaftlichen Begleitung.* Mannheim: Typescript.

Jahre, L., & Werner, H. H. (2011). Die lernende Stadt – Integration, Talente und Bildungsgerechtigkeit in Mannheim. In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung* (pp. 273–283). Wiesbaden: VS.

Kussau, J., & Brüsemeister, T. (2007). Educational Governance: Zur Analyse der Handlungskoordination im Mehrebenensystem der Schule. In H. Altrichter, T. Brüsemeister, & J. Wissinger (Eds.), *Educational governance* (pp. 15–54). Wiesbaden: VS.

Mack, W. (2008). Bildungslandschaften. In T. Coelen & H.-U. Otto (Eds.), *Grundbegriffe Ganztagsbildung* (pp. 741–749). Wiesbaden: VS.

Neu, M., Strohmeier, K. P., & Kersting, V. (2011). Sozialberichterstattung als Grundlage für eine kommunale Politik gegen Segregation. In W. Hanesch (Ed.), *Die Zukunft der "Sozialen Stadt". Strategien gegen soziale Spaltung und Armut in den Kommunen* (pp. 219–240). Wiesbaden: VS.

Olk, T., & Somborski, I. (2013). Sozialraum-bezogene versus Biografie-begleitende Vernetzung. Dilemmata der Bildungsvernetzung in der Mannheimer Neckarstadt-West. *Lehren und Lernen No. 10/2013*, 4–9.

Stadt Mannheim. (2013). *Vom Ziel her denken. 2. Mannheimer Bildungsbericht*. Mannheim.

Stadt Nürnberg. (2012). *Integriertes Stadtteilentwicklungskonzept Weststadt*. Nürnberg

Stolz, H.-J. (2013). Die Kinder- und Jugendhilfe in lokalen Bildungslandschaften – Ergebnisse einer empirischen Studie. In J. Fischer & T. Kosellek (Eds.), *Netzwerke und Soziale Arbeit. Theorien, Methoden, Anwendungen* (pp. 443–461). Weinheim, Basel: BeltzJuventa.

Educational Work in the Municipality

Heinz-Jürgen Stolz

Abstract The social division of our cities is driven to a significant extent by selection effects in the education system. Low levels of income and education, dependency on transfer income, poor health (defined in psychosocial terms) and deviant social behaviour can always occur separately within society. However, multiple forms of deprivation are now increasingly found in one person or one place: entire "dropout" neighbourhoods. To battle these persistant, chronic problems, local governments are increasingly turning to municipally coordinated educational landscapes and chains of prevention. This chapter sheds light on the social function of such approaches and describes the conditions in they can succeed. The defined target is the perspective of integrated urban/district development planning.

Keywords Educational landscape · Chain of prevention · Local governance · Full-service community education · Segregation · Social space · Educational monitoring · Socio-spatial monitoring · Effect-focused management

In the mid-1990s, the term "educational landscape"—prefixed by "regional", "municipal" or "local" as preferred—ushered in a political discourse among professionals which was new to Germany. While a matter of course in English-speaking countries, among others, with their dominantly pragmatic understanding of education and the approach of "community education" (cf. Buhren 1997), this discourse had long been foreign to the nature of German humanist and neohumanist thought. We will not enter further into this topic (the history of ideas); let us just say that Germany's *universalist* education theory cannot deal with the subject of educational regionalisation, as it sees education as *transcending* unpredictable aspects such as the situation in a place or social space. Additionally, if education means "Anregung aller Kräfte" (stimulating all our forces), then according to educational theory it is seen as a purpose in itself, not primarily as cultivating usable skills. In humanist thought, education shapes people

H.-J. Stolz (✉)
Institut für soziale Arbeit e.V., Studtstraße 20, 48149 Münster, Germany
e-mail: heinz-juergen.stolz@isa-muenster.de

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themselves and does not (as in pragmatism) provide subjects already equipped with logical thought with the "tools" needed to live their lives independently. This humanist educational ideal found its true expression in the socially highly selective *Gymnasium* grammar school.

The situation regarding education theory which is sketched out simplistically here also has a long-term effect on current discussion on educational landscapes, both local (cf. Stolz 2009) and municipal (cf. Weiß 2011): for example, *Gymnasium* schools are still wary of this approach, while primary schools and the "lower" levels of secondary school are increasingly coming to terms with the paradigm of a focus on social space. In the worst-case scenario, the current professional discourse on policy could thus be a sign of a widening gap in the understanding of education: "purposeless" humanism for the upper and middle social milieus, "human-capital-creating pragmatism" for the rest. In an optimistic scenario, by contrast, educational landscapes lead to fairer equality of opportunity:

- by context-sensitive resource management with greater support for socially troubled neighbourhoods and institutions ("treating different things differently"),
- by making family life and work more compatible through more all-day care,
- by improving transition management, including raising the percentage of pupils attending *Gymnasium* and studying.

The empirical truth between these two poles, which are perhaps more about educational strategy than educational theory, is not somewhere in the middle, but in a different place for each educational landscape, i.e. for each place.

The current discourse on education policy can be understood (especially in terms of its focus on regionalisation) as a kind of fragile "historical compromise" between the two scenarios described. For example, institutions of education and advice can be made interculturally receptive as a purely humanist purpose, to create fair equality of opportunity, and/or to tackle the lack of professional staff by employing migrants. The same is also true, for example, of the guiding principles of raising the percentage of pupils attending Gymnasium and studying, or improving the compatibility of family life and work. In addition, the direct economic and exploitative interests in the context of gaining human capital are accompanied by the particular local interests of the municipalities. In times of increased mobility, especially in densely populated urban areas, the municipalities have come to see improved infrastructure in the field of education, child raising and childcare as more than just "soft" pull factors: after all, people today no longer necessarily work in the municipality where they live.

Interest in creating local educational landscapes is thus overdetermined, so to speak, without absolutely being a sign of a paradigm shift in educational theory: it is simply a perspective on planning which currently meets with unanimous approval, no more, no less.[1]

[1]This overdetermination can also be seen in the "Munich Declaration" made by the Association of German Cities on the subject of "Joint responsibility for education" in November 2012. Online at:

The Municipal Aspects of Education

It would be optimistic to say there has been a paradigm shift in education theory, e.g. towards full-service community education (*Ganztagsbildung*, cf. Otto and Coelen 2004; Stolz 2006). Nonetheless, in the context of local educational landscapes, education is increasingly becoming an integral, central element of municipal public services. Even here, however, the aim is rarely to achieve a major breakthrough in regulatory policy, for example by demanding the strict municipalisation of schools. Instead, though people actively welcome the fact that education policy is now a municipal matter, they also expect sufficient regional funding according to the principle of federal and regional duty-sharing laid out in Article 104a of the German Basic Law (*Konnexitätsprinzip*). The lack of any paradigm shift in educational theory can be seen on this level, e.g. in the still very rudimentary state of multiprofessional cooperation, which is of course required as part of the *Ganztagsbildung* concept. Local work currently tends to concentrate on issues around management and cost control (e.g. setting up a municipal educational monitoring system and integrated professional planning), especially the topic of managing the transition from kindergarten to primary school and from school to work. Another important focal point of planning is the dimension of social spaces, partly in the subdivision of networks: at the neighbourhood level within cities or at the level of municipalities within rural districts. The educational management required here (cf. Stefan and Greskowiak 2011) to create local and socio-spatial networks is "unified" in that it

- is intersectional in design (school, continuing education, youth welfare, health promotion, social security systems),
- involves public and private sponsors, the former in the shape of a responsibility-sharing alliance between the state and municipalities, across the multi-level system of political governance (ignoring and sometimes explicitly infringing the *Kooperationsverbot* restricting the state's influence on the education system),
- is designed to favour participation and consensus (here, a distinction must be made between the participation of institutional stakeholders, which is generally more well-developed, and the direct co-determination and participation of the neighbourhood population, parents, children and young people, which is generally weaker),
- lifts the restriction to formal education in schools, at least in terms of its agenda, by introducing *Ganztagsbildung*, and

(Footnote 1 continued)

http://www.miz.org/dokumente/2012_muenchner_erklaerung_staedtetag.pdf. Accessed: 30 March 2014.

- increasingly addresses the spatial dimension of education (e.g. on funding programmes such as the "Social City"[2]) and includes it in its design (see also Böhme and Franke in this volume).

In the optimistic scenario, this creates the conditions which allow increased multiprofessional cooperation with a needs-based design reflecting people's life-worlds. In the pessimistic scenario, this all serves merely to improve the efficiency of social engineering without changing the "additive" division of labour among the institutional educational actors, and without any real chance of creating a truly beneficiary-based, multiprofessional outlook on action. The question which still remains unanswered is thus whether local educational landscapes do actually help bring educational settings themselves closer to people's lifeworlds and increase their social justice—or whether there is actually just better coordination of something which has long existed (see also Olk in this volume).

The many municipal aspects of education feature the following characteristics and limits:

- in the context of (integrated) professional planning, coordination and network management, municipalities create the infrastructural conditions for a paradigm shift in educational theory, but cannot themselves bring that shift about;
- designing local educational landscapes at municipal level is always also based on value judgements derived from guiding principles and the particular compromises over stakeholders' interests (caught between humanism and pragmatism);
- municipalities position "education" within the overall context of municipal public services, which also include, for example, social security, the provision of psychosocial support and the promotion of good health. This wider planning context is currently described using the term "chain of prevention".

The following will outline the educational aspects of this wider context of municipal chains of prevention. It will include the author's experience as the head of the regional coordination office for the North Rhine-Westphalian regional pilot project "Leave no child behind! Municipalities in NRW take preventive action", run in cooperation with the Bertelsmann Foundation.

Education in the Context of Municipal Chains of Prevention

The term "chain of prevention" is basically associated with the following target ideas:

[2]Basic information at: http://www.staedtebaufoerderung.info/StBauF/DE/SozialeStadt/soziale__stadt__node.html. Accessed: 30 March 2014.

Think from the child's point of view

In Germany, the support and funding systems are structured strongly around institutions. The child is turned into a "case" and labelled under the legal system (e.g. as burdened with a "specific developmental disorder" which threatens to put their social participation at risk as described in Section 35a of German Social Security Code (SGB) VIII). "Thinking from the child's point of view" means that when long-term learning difficulties occur, the school quickly activates a municipal support network. This involves different professional psychosocial services (youth welfare services, health system and special needs education) developing tailor-made support with the parents. Here, the school retains the main responsibility throughout for ensuring that the child learns reading, writing and arithmetic—but is not left to cope with the task alone!

As the next step, "one-stop services" could then be organised so that the parents do not have to jump through bureaucratic hoops or require extraordinary knowledge management skills just to get information on the support and funding available to them. Complicated application processes and a sheer lack of knowledge about the existence of support and funding facilities are key factors in the social production of educational and developmental disadvantage. In this regard, the Lübeck Education Fund[3] can be considered an example of national good practice. This combines the low-threshold provision of "one-stop services" in standard facilities with a corresponding solution for funding and billing. As so often, this kind of innovative solution does not stand alone, but is lined to other socially inclusive models: in the case of Lübeck, one example is full-service community education activities which span various schools and school types, including some at places of learning outside school, e.g. when *Gymnasium* pupils carry out theatre projects along with SEN pupils as part of standard full-service community education, with those involved placing no special emphasis on this individual breach of the school system's categorisation structure (cf. Meinecke et al. 2009).

Combine Evidence-Based Work with Results-Based Management

When designing municipal chains of prevention and local educational landscapes, there is a particular need for data on individuals. This can be used to study longitudinal developments in children's and young people's biographies (educational and otherwise) depending on the economic, social and cultural resources offered by their home and social space. The data can then be complemented by small-scale

[3]Initial information on the concept: http://www.alleinerziehende-bmas.de/tl_files/nwhfa_downloads/publikationen/Produktionsnetzwerke%20und%20Dienstleistungsketten_Reis_BMFSFJ_2010.pdf. Accessed 30 March 2014.

information from the municipal planning department (see also Gehrmann et al. in this volume). Evidence-based "education as a component of the city" cannot, after all, be achieved if

- fair comparisons cannot be made between establishments for education and childcare (e.g. between individual kindergartens or schools) based on social and school indices,
- small-scale monitoring cannot be carried out of education, social issues and health (ideally down to street level) so as to investigate the sociospatial segregation tendencies at neighbourhood level,
- systematic municipal contexts cannot be set up for results-based management and participation-based urban development and maintained as an aspect of integrated professional planning.

In the context of municipal planning, evidence-based and participation-based practice and results-based management (see also Niemann in this volume) are inextricably linked. However, there is considerable resistance to this integrated planning philosophy of "education as a component of the city".

Multiprofessional Cooperation

Another reason for the fragmented way of thinking, not based on people's situations in life or biographies, is the fact that professional cultures have historically evolved separately (cf. Speck et al. 2011). Healthcare, social work and educational subdisciplines (based on a narrow definition of education) view children's and young people's lives and learning from very specific aspects and over very specific timeframes (e.g. school years, the length of a support process or a series of family advice sessions). They never get the whole picture of the biographies (e.g. educational biographies) produced by "unequal childhoods" (cf. Betz 2008). Often, this temporary focus on children and young people is further restricted to an intervention linked to a certain deficit-based diagnosis: the child becomes a "case", a "specific developmental disorder", an example of repeating a school year or some other stigmatised typification.

Multiprofessional cooperation is still possible even with this restriction (e.g. in case conferences and among advisory teams). However, this kind of cooperation, primarily based on institutional interfaces and separate responsibilities, offers far less potential. In these settings the child remains a "case", a "file", and is not seen or involved in the social and material contexts of his or her human ecological system.

Conclusion

As a "component of the city", education is not only related to infrastructure around education and childcare; it is also a key factor in the process of our cities' increasing social and segregational division into troubled and untroubled neighbourhoods. The

educational background of a child's parental home is known to have a decisive influence on the next generation's educational and developmental opportunities. It affects the specific facilities for education and childcare (kindergartens, schools) which are selected, and decisions on the next stage in the school system they will take. Later a family's education can affect their choice of university or training, their selection of a city (commuters) or a residential neighbourhood. It also affects their knowledge management when they access educational and developmental support, as well as the amount of social capital available in the family's surroundings which is useful for their educational biography. Education is highly correlated to good health, family income and other key factors in successful childraising as known from international research on children's wellbeing (cf. Ben-Arieh and Frønes 2007). It makes little sense to look for links in the sense of causal analysis, as all these factors actually interact following the principal of the previously mentioned Matthew effect: "Unto every one that hath shall be given".

In sociological terminology, sociospatial segregation, or to put it more clearly the social divide within our cities, can be said to describe a timeless trend. Anyone wanting to effectively combat the associated spatialisation of social inequality requires integrated plans of action. Urban and district development can no longer be restricted to urban planning in its narrower sense. Instead, the construction of urban spaces must always also be seen as the creation or removal of territorial barriers, or as the creation or removal of chances to appropriate spaces. Education, the promotion of good health, social prevention and urban development must thus be brought together in the context of evidence-based, integrated urban and district development planning. Today's pillarised municipal planning structures are still light years away from this outlook, and integrated reporting on education, health and social issues tailored to individual municipalities and social spaces is still a thing of the future.

Bibliography

Ben-Arieh, A., & Frønes, I. (2007). Indicators of Children's Well-being: What should be measured and why? *Social Indicators Research, 84*, 249–250.

Betz, T. (2008). *Ungleiche Kindheiten: Theoretische und empirische Analysen zur Sozialberichterstattung über Kinder*. Juventa: Weinheim, Munich.

Buhren, C. G. (1997). *Community Education (=Lernen für Europa)*. Münster, New York: Waxmann.

Meinecke, A., Schalkhaußer, S., & Täubig, V. (2009). "Stadtteil und Schule"-Netzwerke in der "lokalen Bildungslandschaft" Lübeck. In N. Berkemeyer, H. Kuper, V. Manitius, & K. Müthing (Eds.), *Schulische Vernetzung. Eine Übersicht zu aktuellen Netzwerkprojekten* (pp. 149–162). Munich, New York: Waxmann.

Otto, H.-U., & Coelen, T. (Eds.). (2004). *Grundbegriffe der Ganztagsbildung. Beiträge zu einem neuen Bildungsverständnis in der Wissensgesellschaft*. Wiesbaden: VS.

Speck, K., Olk, T., Böhm-Kasper, O., Stolz, H.-J., & Wiezorek, C. (Eds.). (2011). *Ganztagsschulische Kooperation und Professionsentwicklung. Studien zu multiprofessionellen Teams und sozialräumlicher Vernetzung*. Weinheim, Basel: Juventa.

Stefan, A., & Greskowiak, D. (KGSt). (2011). Werkstattbericht Kommunales Bildungsmanagement. In DLR (Ed.), *Magazin für das Programm "Lernen vor Ort"*. http://www.lernen-vor-ort.info/_media/WB_1.pdf. Accessed March 18, 2014.

Stolz, H.-J. (2006). Dezentrierte Ganztagsbildung. Diskurskritische Anmerkungen zu einer aktuellen Debatte. In H.-U. Otto & J. Oelkers (Eds.), *Zeitgemäße Bildung. Herausforderungen für Erziehungswissenschaft und Bildungspolitik* (pp. 114–130). Munich: Ernst Reinhardt.

Stolz, H.-J. (2009). Gelingensbedingungen lokaler Bildungslandschaften. Die Perspektive der dezentrierten Ganztagsbildung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 105–119). Wiesbaden: VS.

Weiß, W. (2011). *Kommunale Bildungslandschaften. Chancen, Risiken und Perspektiven*. Weinheim, Munich: Juventa.

Educational Planning and Urban Development in Munich

Rainer Schweppe and Wolfgang Brehmer

Abstract Education and urban development are closely linked in the city of Munich. The Education Guideline serves as the strategic foundation as an element of the urban development plan PERSPEKTIVE München; in 2013, the third municipal education report was published. The challenges in education planning are enormous not least due to the predicted population growth, this is further aggravated by the close connection between social background and education results that exists in many cities. That is why creating more educational equality is a top priority for municipal education management. This chapter presents the socio-spatial strategies and measures adopted by the city of Munich, as well as partnerships which have already been established between various departments and actors.

Keywords Education and urban development · Municipal education management · Social index · Education report · Educational equality · Munich support formula · Bildungslokale

Munich is a "high tech" region with a considerable population growth. Since 2007 alone, the population has increased by 140,000 inhabitants to currently 1.45 million. By 2030, a further growth (by 200,000) to 1.65 million is forecast. For municipal educational planners, the development in the age groups of children and adolescents is the main focus. In the last years, the age group of children visiting crèches and kindergartens grew most.

R. Schweppe (✉)
Bosch Foundation, Heidehof Foundation, Munich, Germany
e-mail: rainer.schweppe@muenchen.de

W. Brehmer
Department of Municipal Education Management, Municipal Education Management and Regulation, Munich, Germany
e-mail: wolfgang.brehmer@muenchen.de

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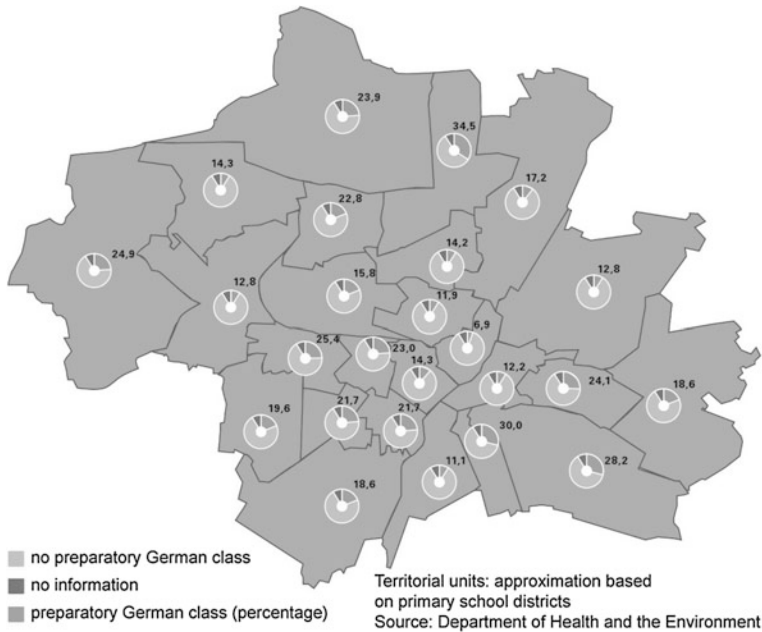

Fig. 1 Early childhood education, care and supervision: share of children receiving remedial language training (preparatory German class), school entry health examinations 2011/12 (in %) (cf. City of Munich 2013)

The composition of the city population in Munich is characterised by internationalisation and immigration. A total of 38.6 % of the inhabitants had a migrant background in 2012, in the age group of those younger than 18 years old, it was 54.7 %.

Education and urban development are traditionally closely connected in the City of Munich. There is a broad consensus in urban society that education is the key to the future for our society, the basis of individual development, but especially for participation. Munich is committed to the concept of a "municipal educational landscape". Its main characteristics are a comprehensive understanding of education that takes into account the entire educational biography including social, cultural and sports education as well as the cooperation and networking of all actors in the spirit of a comprehensive system of education, care and supervision.

Munich already has a well-established system for data-based municipal educational governance with the Educational Report (cf. City of Munich 2006; cf. City of Munich 2010; cf. City of Munich 2013), the Educational Guideline (2007, 2010) as part of the urban development programme PERSPEKTIVE München as well as annually conducted strategic management closely linked to budget planning as its core elements. Municipal Education Management is an organisational unit with cross-divisional responsibilities that is permanently integrated into the Department of Education and Sports. It systematically and continuously links the responsible

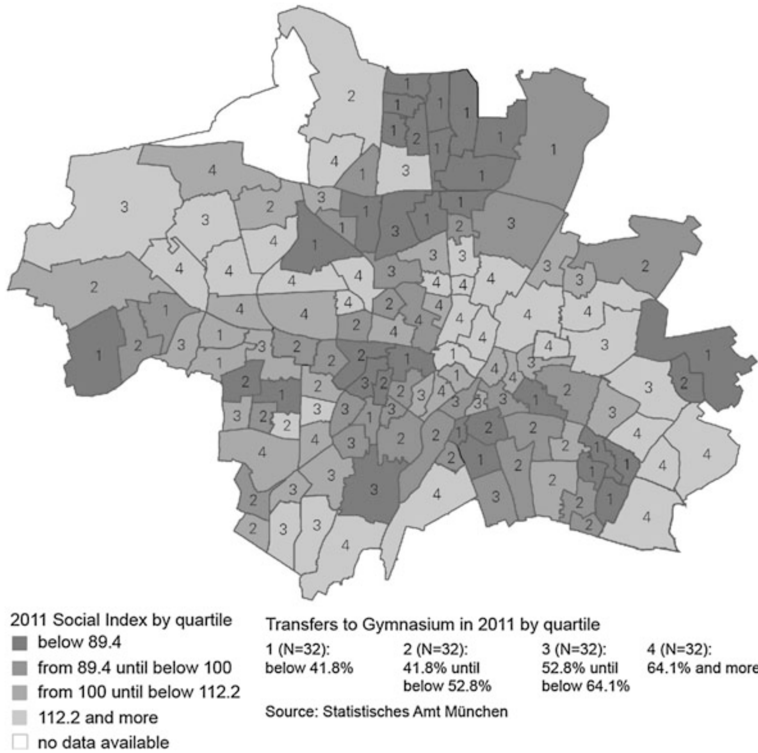

Fig. 2 Transfer rates 2011 to the Gymnasium from public primary schools according to school district and social index 2011 (Munich Educational Report 2013)

players in education across the city and within the city districts (local education management) by taking into account additional staged management levels observing their respective responsibilities.

As the data in the Educational Report demonstrates, there is a close connection between the social background and education results in Munich—as is the case in many cities. This already becomes evident in early education periods. Across the city, for example, 19.8 % of the children examined in the school entry health examination in 2011/12 received remedial language training by means of the preparatory German class, but, depending on the city district, there was a deviation of between 6.9 and 34.5 % (see Fig. 1).

A socio-spatial analysis of the transfer rates to the Gymnasium (secondary school that ends with a degree entitling students to pursue higher education) according to school districts demonstrates how closely the educational path and education success are already linked in the primary school age. The transfer rate to the Gymnasium tends to be higher the less “burdened” the school district in which it is located or the higher its social index value (see Figs. 2 and 3).

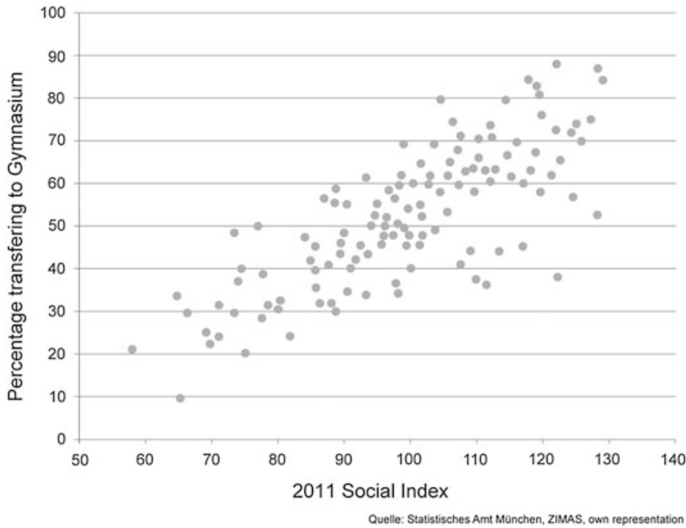

Fig. 3 Transfer rates 2011 to the Gymnasium and social index 2011 of the public primary schools in Munich (*Source* Statistical Office Munich, ZIMAS, own representation)

The PISA studies demonstrated that especially in Germany, there is a strong link between a child's successful participation in education and its parents' social status. It is therefore necessary to examine the general conditions to conduct differentiated education management.

The Statistical Office Munich establishes a social index with three parameters to evaluate the school district in terms of the social space. Methodically, it is strongly inspired by the approach taken by education planners in Zurich (cf. Zurich Department of Education 2012). In it, three parameters are condensed to form an index value per unit of space. The share of households with Abitur or Fachabitur (school-leaving certificates entitling the student to pursue higher education) of all households, the spending power index and the share of foreign citizens in the population with principal residence are used as proxies for the socio-economic location.

The creation of more education equality is defined as the biggest challenge in the Education Guideline that was passed unanimously by the Munich City Council in 2010. It is pursued with special strategies and measures that shall be examined in more detail in the following.

The participation in the "Lernen vor Ort" ("local learning") initiative, the most comprehensive educational programme to further develop education management on a municipal level, is used to achieve this objective just as the successful application as an educational region in Bavaria was.

All structural approaches and projects initiated in the first funding period of the "Lernen vor Ort" initiative (2009–2012) are based on the strategies for implementation as defined in the Education Guideline and serve to increase equal

opportunities and establish educational equality. They were implemented in specific cross-departmental and cross-institutional communities of responsibility (Fig. 4).

In the second funding period (2013–2014) of the "Lernen vor Ort" initiative, this approach to cooperative eduction management was further developed into seven subject areas along the education chain. The engagement of foundations is especially worth mentioning in this context, for example those foundations operating within the newly founded Education in Munich network of foundations that is coordinated by the Kuenheim Foundation of BMW AG.

Munich's application as an "Educational Region in Bavaria" in 2013 demonstrates that there is a high degree of alignment between the five pillars of this state initiative and the subject areas of the federal "Lernen vor Ort" programme. We expect the cooperation of all players involved in education, but especially of the cities and the state, to be considerably improved and stabilised based on this approach. Special emphasis is also placed on a stronger connection of school development planning and youth welfare planning efforts. Munich already complies with the expectations phrased in the position paper of the Bavarian State Youth Welfare Committee (*Bayerischer Landesjugendhilfeausschuss*) to a great extent. The cooperation between youth welfare services and schools mentioned in the fourth pillar of the Education Regions Initiative is especially developed further in the context of the efforts to expand full-time education.

Munich is faced with enormous challenges not least due to the predicted population growth. The subjects mentioned in the fifth pillar ("Facing challenges resulting from demographic change") are therefore of paramount importance. This holds true for sustainable school building management, for which the City Council set a clear signal most recently with its school building offensive, but also for a stronger regional, i.e. urban, school and education development. In total, an investment volume of roughly € 2 billion will be implemented in the next years in school construction.

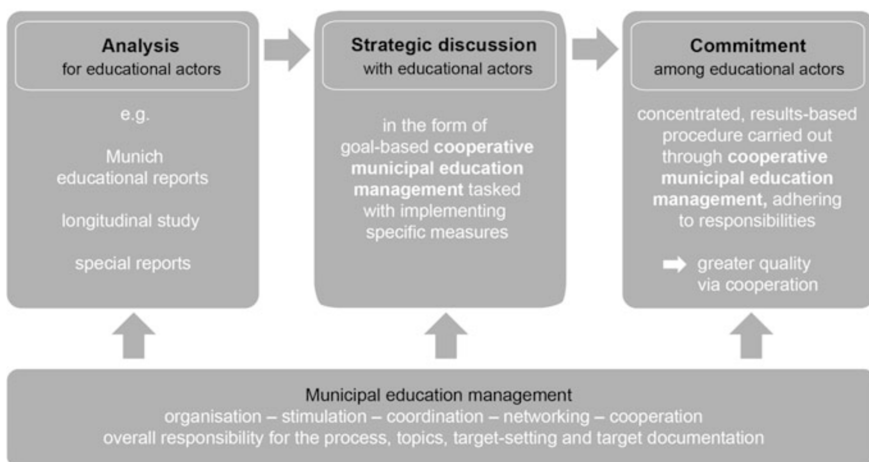

Fig. 4 Munich approach to cooperative municipal education management (own representation)

In this context, the further development of full-time education that is urgently needed from the perspective of education and family policy and which in Munich is supported by a municipal service agency that is unique in Germany should also be mentioned.

The Munich City Council defined how a modern learning environment for full-time education can be designed structurally and organisationally in its “learning house” concept for the future. It meets the demands of a flexible and multi-functional space allocation plan and supports the core elements of school development. In further developing full-time schools by doubling the number of full-day programmes at municipal secondary schools as was decided in July 2013, the City of Munich is leading the way in an exemplary manner.

The “Munich support formula” for the more than 1.200 publicly funded child-care facilities is an outstanding example for the “Munich approach” of integrating structures, instruments and innovation in education: Based on a decision by the City Council, a special community of responsibility was established—an advisory committee—in which all relevant internal and external players are represented. The Municipal Education Management unit is responsible for the overall responsibility and coordination. Data from the Educational Report and the social monitoring is used as the essential instrument. Innovation in education, i.e. what reaches the citizens, is a considerable improvement of the general conditions for systematic, individual support for children with difficult initial learning capabilities, irrespective of the institution or the place of residence. This innovative concept, in particular, meets the requirements described in the third pillar of the educational regions initiative (“no talent must be lost”) and can also be applied to other municipalities. The Munich City Council provides up to an additional € 50 million until the completion of the final stage.

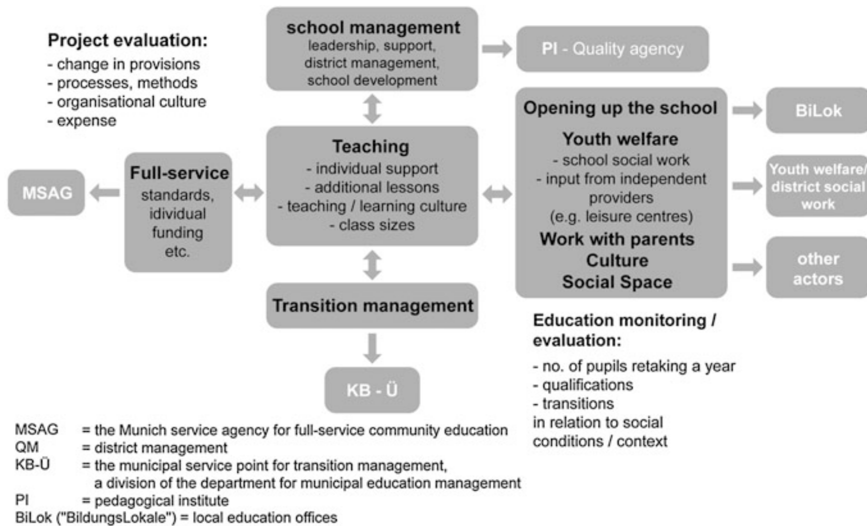

Fig. 5 Fields of action in demand-oriented school development (own representation)

The transfer of this concept of a more demand-oriented budgeting to schools is already being implemented at selected schools. In an exemplary cooperation, the school, youth welfare services, the city, the state, structural further development and practical implementation have been linked (see Fig. 5).

The conceptual design and implementation, however, require just as much engagement of the players involved and the respective resources as the management and further development of the support formula does. It is about change management in the best sense of the word.

The local education management with local education counselling that was conceptually developed and implemented in the three neighbourhoods Hasenbergl, Neuperlach and Schwanthalerhöhe during the first funding period of the "Lernen vor Ort" programme has been transferred to a fourth neighbourhood, Neuaubing, in the second funding period. It is especially in this approach specific to a major city but at the same time local that all five pillars of the education regions initiative take effect, but especially the meaning of "education as a location factor" mentioned in the fifth pillar. The objective is to reduce background-specific disadvantages in education and to operatively build effective and sustainable structures for cooperation in the city district. In these efforts, education becomes the driving force of district development and contributes to improving the quality of the respective location. Du to the convincing results of the evaluation, the Munich City Council decided as early as in December 2013 to make the previous "BildungsLokale" permanent and to establish two additional ones.

The paramount importance of the subject "Organising and accompanying transitions" mentioned in the first pillar is accommodated by structurally anchoring strategic transition management as a core element of municipal education management. Closely linked to monitoring, all transitions are systematically recorded and conceptually handled. Especially in case of the transition from school to a professional career, the newly developed community of responsibility is used to turn a transition system with a historic tradition into "transitions with a system" (Fig. 6).

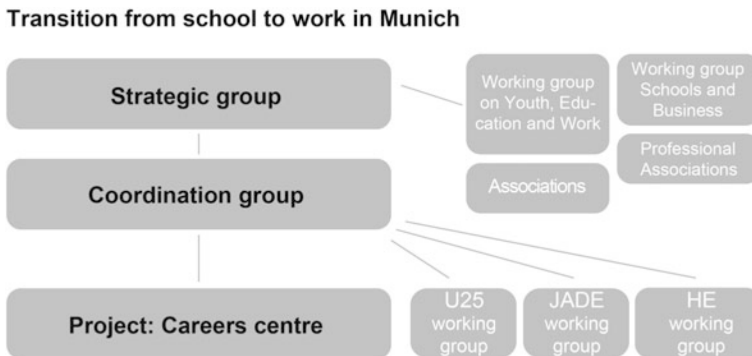

Fig. 6 Cooperation structure: transition from school to professional career in Munich (own representation)

The exemplary characteristic of transition management in the learning and adventure camps for students at *Mittelschulen* or the so-called LuKS—learning environments at the transition from kindergarten to primary school—have already been established with a lasting effect.

The setting of priorities in the "Lernen vor Ort" programme in the fields of action "integration" and "family education/work with parents" is also very important for the further development as an education region because these are vital challenges with regard to content for the education system in Munich.

The coordination and further development of content for the "early support" developed as a model based on data of the educational and social monitoring has already been transferred to three further city districts. After a special evaluation, the City Council decided to make the efforts permanent by implementing an overall concept for "early support" that further sets the course so that children and parents in risk situations are supported as early and as precisely as possible.

In conclusion, we can state that in Munich, significant steps have been taken to achieve more educational equality and to effectively support children right from the start. Caught between increasing tendencies towards segregation and the foreseeable skills shortage, enormous challenges remain.

Bibliography

City of Munich, Department of Education and Sports (Ed.). (2006). *Erster Münchner Bildungsbericht*. https://www.schulberatung.bayern.de/imperia/md/content/schulberatung/pdfmuc/broschueren/bildungsbericht_stadt_muenchen_06.pdf. Accessed 25 Apr 2014.

City of Munich, Department of Education and Sports, Municipal Education Management (Ed.). (2010). *Münchner Bildungsbericht 2010. Kommunales Bildungsmanagement*. http://www.muenchen.de/rathaus/dms/Home/Stadtverwaltung/Referat-fuer-Bildung-und-Sport/pdfs/Bildungsmonitoring/Bildungsbericht-2010/Bildungsbericht%202010.pdf. Accessed 25 Apr 2014.

City of Munich, Department of Education and Sports—Central Public Relations (Ed.). (2013). *Münchner Bildungsbericht 2013*. München: dm Druckmedien GmbH. http://www.muenchen.de/rathaus/dms/Home/Stadtverwaltung/Referat-fuer-Bildung-und-Sport/pdfs/kb/MuenchnerBildungsbericht2013.pdf. Accessed 25 Apr 2014.

Department of Education, Canton of Zurich. (2012). *Strategie Frühe Förderung*. http://www.bi.zh.ch/dam/bildungsdirektion/direktion/bildungsplanung/fruehe_foerderung/dokumenteuebersicht/def_120521_BIZH_BP_Strategie_fruehfoerderung_download%20opt.pdf. Accessed 25 Apr 2014.

Managing Educational Landscapes

Lars Niemann

Abstract The topic of this chapter is the management of the processes on the intersection of space and education. When the realization of educational landscapes is connected to spatial activities such as the construction of buildings or an urban concept for the distriet, implementation is highly complex. Both educational actors and planning professionals have work together with the public administration to accomplish the project. This network creates nodes, which are very different from one another. No practice and structure for cooperation is established either on the side of the educational institutions or on the side of public administrators and planners. Nevertheless, there has to be a coordinated process. Management structures are necessary to lead the project towards its goal.

Keywords Educational landscape · Management · Urban planning · Space · Pedagogy

The different types of educational landscapes generally pursue aims which are to be achieved by means of actors from various disciplines cooperating. However, on such projects, there is often no precise idea of what path can be taken to achieve these aims, which actors can take on which roles and tasks, and how the existing and new structures in educational landscapes can cooperate. Even though the need for management in this context has been emphasised (cf. Deutscher Verein für öffentliche und private Fürsorge e.V. 2009, p. 7; Reutlinger 2011, p. 55) and initial studies on management issues have been carried out (cf. Niemann 2014), the subject has not yet been sufficiently included in project implementation. This can cause difficulties with cooperation which can, for example, lead to delays.

This chapter presents some selected management aspects related to local educational landscapes. They are largely derived from the Altstadt Nord educational landscape project in Cologne, which was investigated as part of my dissertation. To this end, the term "management" is first defined so as to gain a uniform under-

L. Niemann (✉)
GK Software AG, Berlin, Germany
e-mail: lars.niemann@gmail.com

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standing of what management is, and what form it can take in the context of educational landscapes. Next, the qualities of local educational landscapes are described in more detail and circumscribed. Their particular features are then used to present a selection of tips on their management. The aim is to put forward findings on the management of local educational landscapes which can be used to check whether methods can be transferred to future projects.

Management

The term "management" is used in many contexts relating to social structure. Whether in economics, politics or administration, management is usually about using mechanisms to steer or alter a system, in order to reach a target. Following Mayntz and Heinrich, it is not necessarily assumed that management activities always result in actions being taken, or have to lead to success (cf. Mayntz 1997, p. 188ff.; Heinrich 2008, p. 34). This might at first seem surprising, as one would generally assume that the whole purpose of management is to initiate actions. However, bearing in mind the form taken by managerial activity and its effects in complex groups of actors, it soon becomes clear that in modern times, people do not understand management as rigidly pushing through tasks: instead the focus is on coordinating activities carried out by different actors following specific kinds of logic. The results achieved by actions depend on a variety of mutual influences (cf. Altrichter 2011, p. 124ff.). This understanding has changed over history, and is described by Malik (2008) as the opposing poles of "construction" and "evolution" (ibid., p. 79ff.). From this point of view, constructed management is linear, regulated and hierarchical. It offers actors little leeway and shows a high level of formalisation. In evolutionary terms, meanwhile, management is characterised by the actors being involved in social interaction (see Fig. 1). Heterarchies and

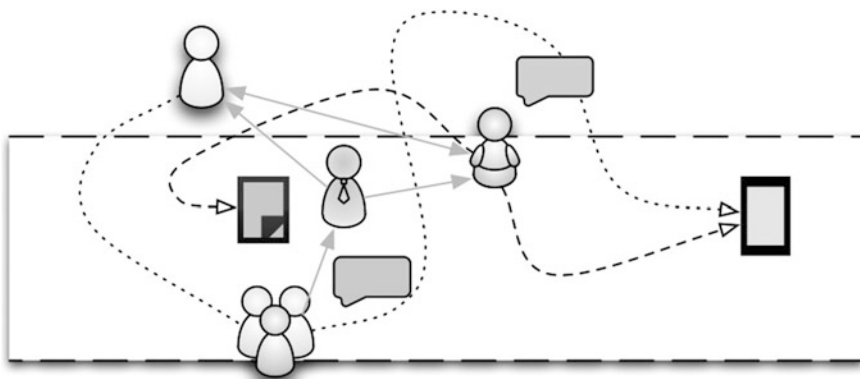

Fig. 1 Evolutionary management, in which the aim and coordination are negotiated among the actors (*Source* own representation)

networks form the basis, while communication and independent action with decentral decision-making and a low level of formalisation are characteristic.

Every system—according to Rüegg-Stürm (2003, p. 17ff.) and Malik (2008, p. 36) that means all forms of enterprise or organisation—lies somewhere between these two poles and uses elements of both managerial extremes. Depending on the specific kind of system and how the actors are structured, rules are defined within enterprises which act to coordinate them. This coordination always takes place with reference to certain individuals, who act as the smallest unit within a system. Meanwhile, individuals can be part of a larger structural context. They can have an influence as collective actors (e.g. on a committee) or be part of a corporate context (e.g. an organisation). Decisions are then made within the system depending on the role and its associated opportunities or restrictions. Figure 2 is a representation of the actor groups and their possible connections.

For local educational landscapes, there is no exclusive managerial model. The key elements (aims, actors, structures and mechanisms) depend on the project and have to be individually negotiated.

Local Educational Landscapes

The term "educational landscape" (German: *Bildungslandschaft*) has become highly popular in recent years when discussing cooperation between actors in education on different spatial levels. As far back as 2007, the Association of German Cities described the municipal level as a specific space for educational processes (cf. Deutscher Städtetag 2007). If the understanding of locally rooted

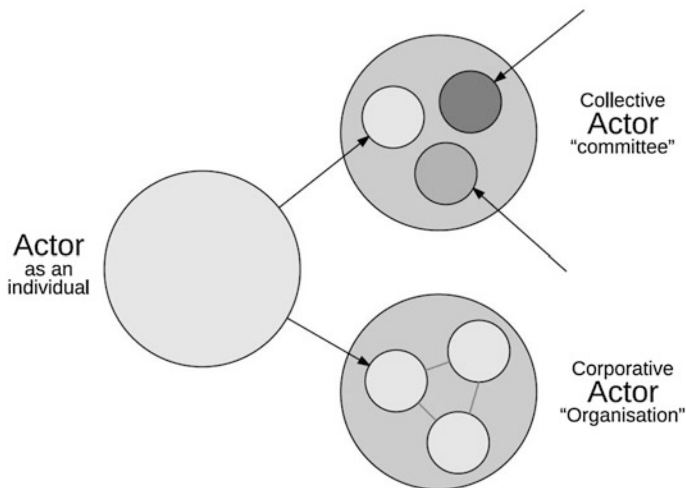

Fig. 2 Individual actors and how they may be connected in collectives or corporations (*Source* own representation)

learning is extended to include the aspects of urban planning or construction, this creates a model for educational landscapes which Berse (2011, p. 41) described as "social space as an educational space". To extend this typification, introducing other characteristics and properties described in the past (e.g. cf. Bleckmann and Durdel 2009; Otto and Bollweg 2011; Mack 2007), this chapter is based on the following definition of a local educational landscape: "Local educational landscapes are long-term cooperative ventures under municipal responsibility carried out by actors from formal and non-formal educational organisations within a defined urban space, expressed through construction, acting professionally on a defined basis (in terms of structure and content) as a recognisably unified system and predicated on the learners' perspective" (Niemann 2014, p. 32). The aspects which seem especially important to me in this context are that an educational landscape explicitly ties in with a specific urban space, and that actors from the field of education cooperate with those from the field of planning and construction. The point is on one hand to take into account spatial aspects on the level of the neighbourhood and the building within the concept of the educational landscape, and on the other for the professions' activities to interconnect.

Local educational landscapes are confronted with many challenges. The actors come from different professions within the professional fields of education and planning, and their cooperation is complex. Until now, these fields have rarely come into contact and thus have little experience of cooperation. Moreover, the professions work in fundamentally very different ways. The field of spatial planning and construction generally works in cyclical projects with a clear beginning, end and timeframe. The fields of education, by contrast, frequently work on ongoing processes and continuous developments which are not defined by temporal or product-based milestones. Though the aim—creating a local educational landscape—is pursued by all the actors, the subdevelopments are carried out by different groups of people, meaning that these processes have to be coordinated with other working methods.

Case Study

A case study is intended to make clear the specific issues with which projects may find themselves confronted. The Altstadt Nord educational landscape is a project at the point where educational cooperation meets spatial development (e.g. in a city). It is centrally located in the structurally dense city centre of Cologne. Six educational organisations are grouped around an urban open space (Klingelpützpark). The motivation behind the cooperation arises partly by the need to extend and restructure the building and open areas, and partly by the hope of improving the general situation of the institutions in a way that recognises their value. The jointly defined guiding principle is the meaningful learning intended to form the basis of all activities. The driving forces behind the project, which was launched in 2006, come from the municipality and civil society in the form of Cologne city administration

and the Montag Foundations, from Bonn. In 2013, after several years' preliminary work, a competition was carried out to decide how the structures and open spaces would be planned.

Findings

The investigation into the Altstadt Nord educational landscape in Cologne succeeded in showing that the management of targets, actors, structures and mechanisms plays a key role in the development process. The following descriptions will highlight some selected aspects.

Timeframes

It can already be seen from the case example that creating educational landscapes can take a long time. In Cologne, seven years went by just between the start of the project and the decision to hold an architectural competition, and none of the buildings have yet been restructured or newly built. Projects such as "Tor zur Welt" in Hamburg or "Campus Rütli" in Berlin are working within similar timeframes. There are many reasons for these long timespans. The Cologne is one of the first of its kind in terms of how deeply it connects space and education; here, not enough knowledge had initially been gathered through experience to carry it out. The fact that the educational organisations cooperated together, as well as with the municipality and a foundation, also required time for trust and acceptance to develop. Actors had to obtain qualifications for new subjects and cooperative structures had to be developed and established. Work for studies and competing spatial processes required certain amounts of time and, on top of all this, at times the process in Cologne almost came to a halt in terms of visible results due to a municipal election and the activities of a citizens' action group.

There are two sides to the aspect of time. On one hand, having plenty of time has a positive effect on processes, as the actors have the opportunity to develop shared positions with regard to the project and examine the effects of decisions in great detail. Mutual trust can be built up, and an understanding can be gained of the working methods within the group of actors. On the other hand, it is highly frustrating for those working on the project if there is no perceptible progress, and they feel as if they are always discussing the same subjects from different points of view. The expected results do not appear, and they may ask themselves whether the project is worthwhile.

For the context of the timeframe, the following managerial recommendations can be made (cf. Niemann 2014, p. 181ff.): To keep the actors constantly motivated, firstly continual developments should be planned and secondly measures should be made visible by means of milestones. Both of these steps help participants identify

with the project and help the actors remain united over time, even if there are staffing changes. The spatial plans are often a highly noticeable part of the process, require decisions to be made on time and work towards a defined set of results. At the same time, there are long periods during which there is no visible development (e.g. when studies and investigations are being carried out). The educational discussions, by contrast, generally do not have a deadline. With regard to the different speeds at which actors from the spatial and educational contexts work, it thus makes sense to make use of spare time carrying out appropriate measures, thus creating continuity within the process.

Project Participants and Structures

The point has already been emphasised that, within local educational landscapes, actors work together from various professional fields. This in itself is not new, but educational landscapes involve combinations of spatial planning and educational development of a kind which have generally not previously come about. The actors do not know one another, and have different working methods. Moreover, they come from different structural contexts. Individuals' actions mainly take place within forms of organisation run by the state or civil society. As well as their personal motivation, they always have to take into account the framework of the organisation in question when cooperating in an educational landscape. When they cooperate on committees, all these factors come together to create conflict within the project.

In Cologne's Altstadt Nord educational landscape, at the start of planning the participants drafted a project structure for purposes of cooperation. During a series of workshops, they discussed who should be on what committees and what their function would be. The result went into a cooperation agreement signed by the educational establishments, the city of Cologne and the Montag Foundation. Though the structure was designed for the partners to cooperate together as equals, it did have some hierarchical aspects. Figure 3 shows how the groups of actors are linked.

The strength of the structure lay in the fact that it was not established by external influences but through a process of negotiation by participants. This process created a great acceptance and identification. In 2011 the structure was changed, with a stronger focus on spatial/constructional activities. On the part of the educational establishments, the "support committee" remains the central board. On the part of the municipality, an Altstadt Nord educational landscape office was set up to coordinate and manage the project by means of its direct link to the city's mayor. This function is highly significant, as it appears to be the only way that all the project activities can be brought together and managed with simultaneous political support. Of the committees, it can be said that their relevance lies in making actual decisions or recommendations during this process. The establishment of irrelevant structures soon leads to frustration among the actors and can make it a great deal harder to carry out a project.

Close involvement in management is a measure which is recommended for local educational landscapes. The differences between the departments and lack of internal cooperation structures mean that there should be a central office which can take on coordination tasks. Cooperation which spans all the different authorities is, after all, essential. Whether a central management body is established on a municipal level, or instead (or in addition) there is coordination with close links to the educational establishment, the management should have a communicative, facilitative form. The complex structure formed by actors at the interface of spatial planning and education should be understood from the various perspectives. An attitude of pushing through regulations has proven counterproductive. For work to be carried out, it is crucial that individuals and corporations are open to other

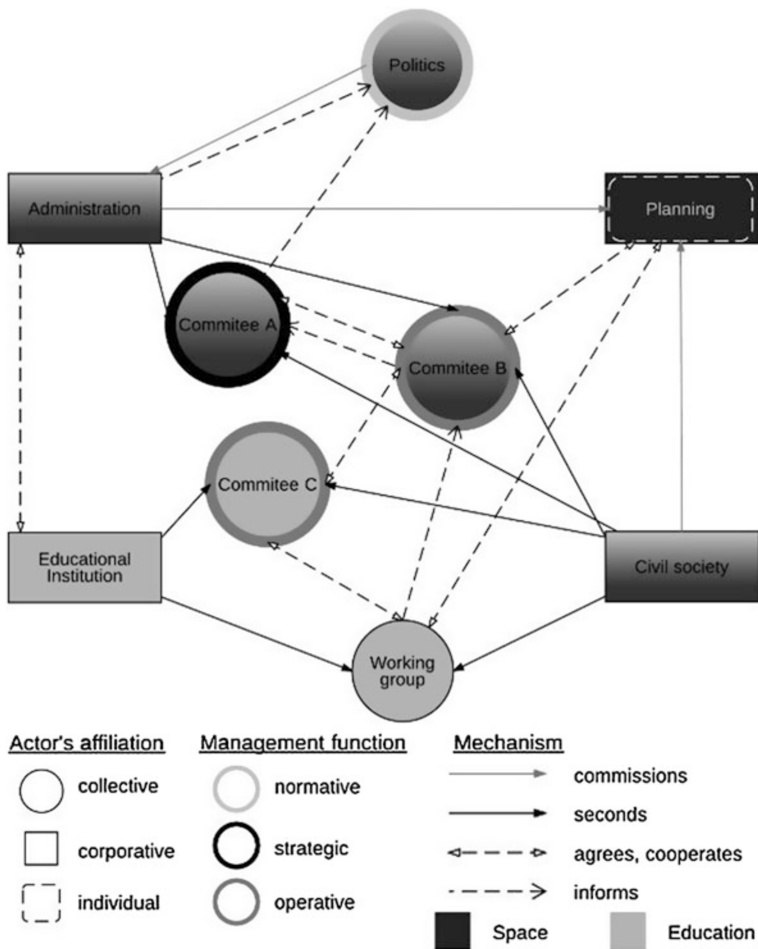

Fig. 3 Chart showing the groups of actors in a local educational landscape with corresponding functions and management mechanisms (*Source* own representation)

professions, attitudes, working methods and structures. This is the only way for shared targets to be achieved.

In Cologne, developing the structures and formulating a cooperation agreement were important spurs for the project, creating a firm basis for cooperation and playing a key role in building trust. However, no project takes a linear course, so structures need to be made dynamic, allowing for adjustment.

Commitment

As well as structural prerequisites, the question of commitment plays a crucial role when managing local educational landscapes. Here, three basic mechanisms are effective: working towards a goal, planning and maintaining developments, and actors' agreements/actions.

All actions taken and parts of the process carried out must be focused on an achievable goal. The actors themselves should decide what that goal will be. In Cologne, the cooperation agreement was a strong guideline at the start of the project, creating a great deal of commitment among all participants with regard to achieving the main goal.

The combination and overlapping of spatial and educational processes means that actors in local educational landscapes find themselves confronted with influences from within and from outside their organisations. On the whole, the institutions can organise local cooperation independently: they can define measures, carry out educational projects and arrange inter-institutional cooperation. They are usually only limited by the systemic background conditions, though they can determine these themselves to a great extent. This contrasts with urban construction developments and construction carried out on the institutions' existing or new buildings. Here, actors initially have only limited influence: actions are largely determined externally. However, the point of local educational landscapes is that they link precisely these two fields: the spatial and the educational. As a result, there are overlaps and old boundaries between responsibilities are blurred. The responsibility for processes, meanwhile, is clearly regulated. However, the opportunity arises, thanks to the overlaps, to define spatial prerequisites from the point of view of education, and to support education by means of spaces. Accordingly, the definition of the thematic boundaries should not take the form of assigning responsibility to actors, but should instead be used in the interests of each plan. To achieve this, clear roles need to be assigned. These role are to be understood as functional, not depending on individuals. They help with differentiation and the division of work, and at the same time with coordinating actions (cf. Steinmann et al. 2005, p. 437ff.). If roles are defined or responsibilities delegated by means of committees, it needs to be made clear what opportunities, boundaries and relevant points are connected to the structural elements they involve. To encourage actors to take on responsibility and create commitment, tasks can be divided into manageable

packages which can then be worked on by independent groups, with a great deal of individual responsibility.

In Cologne it turned out that though the structure defined at the start was workable for several years, at the same time informal mechanisms for agreement had developed, meaning that the committees sometimes showed a tendency to lose their relevance. One explanation for this is that though the structural situation was defined on the project, the workflows were left open. There was no definition of the mechanisms of cooperation. As a result, responsibilities were not always clearly defined and thus people were not effectively committed to their actions. As well as structures, effective management thus also involves defining the procedure for coordination between the structural elements.

Conclusion

Local educational landscapes are complex cooperative ventures at the point where spatial and educational development meet. Numerous actors are involved in the process of creation and development; they come from professions with fundamentally differing working methods and which are each part of individual structural situations. Developments are not linear, and the different speeds of different part of the processes creates greater need for coordination and consultation. Moreover, planning is constantly subject to external dynamics and changing background conditions as regards educational policy. Educational landscapes are thus not independent projects; there is a great deal of dependence on internal and external factors.

Management is essential if the educational landscapes are to reduce the randomness of development, and if goals are pursued which may have different temporal and thematic prospects. Management cannot follow a single pattern; instead, individual structures need to be taken into account, which need to be compatible with certain managerial mechanisms in each specific case. It is of advantage if these structures and mechanisms are developed starting out from the projects. A dynamic understanding of management is required, i.e. not hierarchical but built on networks and heterarchies. Management needs to allow a great deal of tolerance and openness for individual responsibility, without being arbitrary as regards the goals pursued.

Local educational landscapes do not spring up from one day to the next, but need their time. For local actors and for political responsibility, it is important to accept this and to combine the necessary staying power with targeted measures to guide the projects to success.

Bibliography

Altrichter, H. (2011). Wie steuert sich ein Schulsystem? Annäherungen an einen Begriff mit Konjunktur. In A. Durdel & A. Knoke (Eds.), *Steuerung im Bildungswesen. Zur Zusammenarbeit von Ministerien, Schulaufsicht und Schulleitungen* (pp. 122–132). Wiesbaden: VS.

Berse, C. (2011). Kommunale Bildungslandschaften - Eine geeignete Konzeptfigur für die Förderung mehrdimensionaler Bildung? In H.-U. Otto & P. Bollweg (Eds.), *Räume flexibler Bildung: Bildungslandschaft in der Diskussion* (pp. 39–50). Wiesbaden: VS.

Bleckmann, P., & Durdel, A. (Eds.). (2009). *Lokale Bildungslandschaften: Perspektiven für Ganztagsschulen und Kommunen*. Wiesbaden: VS.

Deutscher Städtetag. (2007). Aachener Erklärung. http://www.staedtetag.de/imperia/md/content/veranstalt/2007/58.pdf. Accessed 31 Apr 2014.

Deutscher Verein für öffentliche und private Fürsorge e.V. (2009). Empfehlungen des Deutschen Vereins zur Weiterentwicklung Kommunaler Bildungslandschaften. http://www.deutscher-verein.de/05-empfehlungen/empfehlungen_archiv/2009/pdf/DV%2019-09.pdf. Accessed 31 Apr 2014.

Heinrich, M. (2008). Von der Steuerung zu Aushandlungsprozessen als neue Form der Handlungskoordination. In R. Langer (Ed.), *Warum tun die das?* (pp. 31–46). Wiesbaden: VS.

Mack, W. (2007). Lokale Bildungslandschaften: Neue Ansätze der kommunalen Bildungspolitik als Antwort auf Herausforderungen des zwölften Kinder- und Jugendberichts. In Deutsche Kinder- und Jugendstiftung (Ed.), *Bildungslandschaften in gemeinschaftlicher Verantwortung gestalten : Grundsatzfragen und Praxisbeispiele mit CD-ROM: die Fensterschulen in Groningen* (pp. 16–34). Berlin: DKJS.

Malik, F. (2008). *Unternehmenspolitik und corporate governance. Wie Organisationen sich selbst organisieren* (Vol. 2). Frankfurt a.M., New York: Campus.

Mayntz, R. (1997). *Soziale Dynamik und politische Steuerung: theoretische und methodologische Überlegungen*. Frankfurt a.M., New York: Campus.

Niemann, L. (2014). *Steuerung lokaler Bildungslandschaften. Räumliche und pädagogische Entwicklung am Beispiel des Projektes Altstadt Nord Köln*. Wiesbaden: VS.

Otto, H.-U., & Bollweg, P. (2011). Bildungslandschaft: Zur subjektorientierten Nutzung und topologischen Ausgestaltung. In H.-U. Otto & P. Bollweg (Eds.), *Räume flexibler Bildung: Bildungslandschaft in der Diskussion* (pp. 13–35). Wiesbaden: VS.

Reutlinger, C. (2011). Bildungsorte, Bildungsräume und Bildungslandschaften im Spiegel von Ungleichheit – Kritischer Blick auf das "Räumeln" im Bildungsdiskurs. In H.-U. Otto & P. Bollweg (Eds.), *Räume flexibler Bildung: Bildungslandschaft in der Diskussion* (pp. 54–70). Wiesbaden: VS.

Rüegg-Stürm, J. (2003). *Das neue St. Galler Management-Modell : Grundkategorien einer integrierten Managementlehre. Der HSG-Ansatz* (2nd edn.). Bern: Haupt.

Steinmann, H., Schreyögg, G., & Koch, J. (2005). *Management. Grundlagen der Unternehmensführung. Konzepte – Funktionen – Fallstudien* (6th edn.). Wiesbaden: Gabler.

Regulatory Areas of Municipal Education Management on the 'Learning Locally' Programme

Markus Lindner, Sebastian Niedlich, Julia Klausing and Thomas Brüsemeister

Abstract Developments towards stronger coordination and networking at the regional and local level can be observed in the German education system since the mid-1990s. This applies to forms of cooperation between schools and youth welfare or local structures, which include further continuing education in the context of regional development, district and neighbourhood-based education or the transition from school into vocational education or work. In recent years, approaches that place the municipality at the centre of regionalisation strategies have increased in number. One of the most extensive of these types of approaches is the programme "Learning Locally" (Lernen vor Ort) from the Ministry of Education and Research. This chapter seeks to identify the regulatory areas for municipalities that typically ensue when integrated municipal education management is to be developed.

Keywords Schools · Education management · "Learning Locally" · Municipal education management · Governance research · Education sector

Since the mid-1990s a development can be observed in the German education system towards stronger coordination and networking at the regional and local levels (cf. Luthe 2009; Weiß 2011 as well as the articles in Bollweg and Otto 2011).

M. Lindner (✉)
DKJS, Standort Hamburg, Programm: Transferagenturen für Großstädte,
Winterhuder Weg 86A, 22085 Hamburg, Germany
e-mail: markus.lindner@transferagenturen-grossstaedte.de

S. Niedlich
AB Allgemeine Erziehungswissenschaft, FB Erziehungswissenschaft und Psychologie,
Freie Universität Berlin, Habelschwerdter Allee 45, 14195 Berlin, Germany
e-mail: sebastian.niedlich@fu-berlin.de

J. Klausing · T. Brüsemeister
Justus Liebig Universität Giessen, Karl-Glöckner-Str. 21E, 35394 Gießen, Germany
e-mail: j.klausing@gmx.de

T. Brüsemeister
e-mail: thomas.bruesemeister@sowi.uni-giessen.de

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In this regard, a series of initiatives have been developed in the past few years, which apply to various educational fields[1]: cooperation between schools and youth welfare or local structures, further education within the context of regional development, district and neighbourhood-based education or the transition from school to vocational training. In recent years, approaches that place the municipality at the centre of regionalisation strategies have increased in number. One of the most extensive of these types of approaches is the "Learning Locally" programme. In the following, the "Learning Locally" programme will be examined from the perspective of educational governance research (cf. Altrichter et al. 2007; Altrichter and Maag Merki 2010). The analysis is based on the results of the formative evaluation of the programme.[2] This chapter seeks to identify the regulatory areas for municipalities that typically ensue when integrated municipal education management is to be developed.

The "Learning Locally" Programme

The "Learning Locally" programme, initiated by the Federal Ministry of Education and Research, helps local authorities to create and implement integrated, coherent management for lifelong learning (BMBF 2008, p. 4). For this purpose all important educational areas should be incorporated and various areas of responsibility should be merged in order to achieve better cooperation and permeability. The key elements in this process are municipal education management and educational monitoring. The core tasks of municipal education management include an inventory of current educational activities at the municipal level and the grouping and consolidation of responsibilities and stakeholders in the education system.[3] Educational monitoring is intended to serve as the main data basis for the local organisation of education. "Learning Locally" was initially limited to a timeframe of three years (2009–2012). During this period, 40 municipalities received financial support. After this period, supplementary financing was possible for two years.[4]

The formative evaluation consisted of a standardised survey of project heads, project teams, cooperation partners and stakeholders from the project setting as well as qualitative case studies with interviews in 14 of the 40 participating municipalities at two separate points in time. The following empirical findings are based primarily on the case studies.

[1]An attempt at typologising regional educational programmes, although superficial, can be found in Berse (2011).

[2]The formative evaluation has been conducted by Rambøll Management and JLU-Gießen since 2010.

[3]Cf. Lindner et al. (2014) regarding the tasks of municipal education management.

[4]In the continuation of the programme, 35 municipalities received financial support.

Municipal Education Management and the Governance Perspective

Based on research previously conducted on educational processes and structures, it is becoming clear that the programme "Learning Locally" is well suited to be described and explained through a governance perspective:

1. In the past few decades, the state, the economy and civil society have created a confusing proliferation of sometimes short-term, sometimes long-term educational programmes in municipalities, which has become impossible to oversee, let alone manage. Problems dealing with education fall into the responsibility of various departments and professions simultaneously or drag out into 'problem chains' (cf. Birg 2013), without leading to further cooperation between the institutions involved. Cross-boundary problems that cannot be addressed within one area of responsibility (and furthermore have effects beyond specific providers) can only be tackled through a more integrated approach to problem-solving: it is precisely such issues which have led to the development of a governance perspective (cf. Benz 2004a, b, p. 127).
2. Both "Learning Locally" and the governance perspective reject "simple" notions of political or administrative steering. The notion of steering based on this understanding of governance assumes that multiple actors participate in steering processes. Firstly, in the language of governance research, network-building functions are addressed across municipal administration, external partners and civil society and, therefore, tasks belonging to interorganisational governance. Secondly, "Learning Locally" is anchored in the municipal administration, which comprises intraorganisational governance functions. This mixture of inter and intraorganisational tasks (cf. Kussau and Brüsemeister 2007, p. 69ff) appears to be a distinguishing feature of "Learning Locally".
   The stakeholders who are intended to develop and participate in municipal education management relate to each other on various levels which are both horizontally and vertically differentiated. The relationship between these various levels with regards to managerial and directive authority is, however, highly unclear. Expert assessments have their own areas of autonomy that are in an unclear relation (of power) when addressing problems in an integrated manner among different experts. The solution to this dilemma can only be organised by stakeholders through factual negotiations. Such negotiations are fundamental for the governance perspective.[5]
   In order to adopt this perspective, it is necessary to avoid a rationalistic bias that overrates solutions und underrates the conflicts that actors have to resolve before

[5]Namely the analysis perspective. Governance areas can also function without negotiation, for example only through hierarchical arrangements or when an actor changes his/her behavior because he/she is being observed by someone else. The key to this is that none of these mechanisms are normatively inflated, but that an analysis perspective is portrayed that is to be empirically tested.

an integrated solution is possible (cf. Mayntz 2001 regarding "problem-solving bias"). One aspect often neglected is a process perspective that shows the conflicts within which stakeholders develop new structures—such as integrated municipal education management in "Learning Locally"—together and in conflict with one other. In order to address these research gaps, we have observed the work of the stakeholders in "Learning Locally" while developing the programme through Strauss's perspective of his theory of profession.[6]

3. It is difficult to exactly locate the people in charge of steering processes. Departments and professions contain their own hierarchical relations and determine their own areas of influence, which they adhere to for historical reasons. These structures do not provide sufficient justification, should multiple stakeholders want to develop a comprehensive management system. Traditionally, the idea tends to dominate that only municipal authorities should have the responsibility to manage their municipality. If the municipality networks with other actors, the understanding of steering clearly has to be extended, for which we suggest the term "regulatory area".
   While the term "steering" holds on to the nominal authorities, the term "regulatory area" specifies the activities and strategies that the stakeholders actually deal with. From the perspective of organisational theory, this refers to the differentiation between "talk" and "action" (cf. Brunsson 1989). In this manner, considerably more regulatory areas for strategies can be available for municipalities as they are nominally entitled to them as "officially responsible authorities". Such regulatory areas make up the core of "Learning Locally" at the level of actual strategies (as opposed to strategies that are in only in certain agreements or other forms of "talk"). In other words, a *regulatory structure* or rather a *regulatory area* is first created without adding anything new. An integrative structure for educational issues that increases the regulatory capacities of a municipality in the field of education is to be constructed based on existing experiences—with personnel, resources, ideas and stakeholders at different levels. Conceptually, "regulatory *area*" denotes an area for the actions and strategies of municipalities that are, in the first place, *made possible through* programmes such as "Learning Locally". In contrast, the term "regulatory *structure*" should be reserved for processes that are part of a more long-term institutionalisation.

Management and Regulatory Areas of Municipal Education Management

In the following, the regulatory areas will be introduced that concern municipalities when developing municipal education management. The findings of the case studies conducted as part of the formative evaluation will be summarised and

[6]Cf. Lindner et al. (2014).

discussed. The cooperation and coordination among various stakeholders will play a central role in this discussion. Based on our interview data, we differentiate between five regulatory areas, which are displayed in the following Table 1.[7] Subsequently, we will address the areas individually.

Regulatory Area: "Political Integration of Education Management"

The first regulatory area is the political integration of education management in the municipalities. The "municipal head" (mayor, district administrator, departmental head, etc.) in particular plays a significant role. The municipal head can make an important contribution towards integrating municipal education management into administrative work processes by enabling access to stakeholders, communicating the meaning of the subject and promoting participation while also making decisions and issuing instructions. As opposed to his/her symbolic support at the beginning of the project, the active and continuous involvement of the municipal head can

Table 1 Regulatory areas of municipal education management in "Learning Locally"

Regulatory areas in "Learning Locally"	Central elements of the regulatory areas
Political integration of education management at the municipal level	• Support through administrative heads and local parliaments • Education in the context of municipal goals, strategies and guiding principles • High priority of educational goals in the municipality
Cross-boundary cooperation and communication	• Communication beyond organisational levels and borders • Cooperation between different professions • Mediation between differing understandings and traditions
Clarification of position	• Agreement regarding scope and participation possibilities • Clarification of roles, responsibilities and boundaries • Establishment of mechanisms for conflict resolution and settlement of interests
Knowledge-based management	• Identification and development of necessary knowledge • Provision of knowledge • Distribution of knowledge in a manner appropriate for target group
Visibility of municipal education management	• Communication of goals and activities of education management • Visibility of developments and benefit of education management (for example through "products")

[7]The dimensions named in the table can also be presented as "governance equalizers". This is not included in the table in order to avoid overcomplicating the overview, (cf. Niedlich and Brüsemeister 2011) regarding "governance equalizers" in "Learning Locally".

promote this capacity, in particular with regards to communicating the results from education reports, contacting potential cooperation partners or implementing concrete measures. Municipal education management can have the effect of securing this type of support on a continuous basis through the regular provision and preparation of information for local authorities and political leaders (for example in meetings among mayors or heads of administration). For this purpose it is necessary to have comprehensive knowledge of administrative and political decision-making processes so that information, draft resolutions, etc. can be fed into the process at the right point in time.

In addition to political leaders and heads of administration, city and county councils and the corresponding committees can play a significant role for several reasons. Firstly, these institutions make the decisions regarding the mandate of municipal education management and establish the financial conditions for local educational policy on the basis of the budget. Secondly, the debates carried through in these institutions open up the possibility of communicating the goals of the municipality with regards to educational policy and the work of municipal education policy to a wider public and building up pressure on political decision-makers. Through regular reports in planning and expert committees, municipal education management can have an effect on the objectification of political discussions and communicate the necessity of an integrated approach.

Regulatory Area: "Cross-Boundary Cooperation and Communication"

A key feature of "Learning Locally" is overcoming the boundaries between responsibilities and professions. The challenge of the programme is to make the various stakeholders work together and to develop a general awareness of necessary forms of cooperation. Handling problems jointly requires certain structures and occasions for cooperation, in particular, diverse committees that bring together stakeholders from various institutional and professional backgrounds on different levels (directors, experts). It is crucial that the committees are tied to clear goals and tasks, pass resolutions and compile results. The joint discussions and development work offer a chance for the parties involved to reflect on others' traditions and self-conceptions, and for dialogues to evolve between different "cultures".

Continuous cooperation and communication is just as important as cooperation in committees. In this regard, municipal education management in "Learning Locally" does not take place in a "top-down" process in which resolutions from the upper levels are implemented at the lower levels. Even when this is occasionally the case, municipal education management is precisely characterised through the fact that it brings together contributions and impulses from different levels und find ways of feeding them into discussion and decision processes—regardless of their origin and to a certain extent eluding formal and conventional structures.

Regulatory Area: "Clarification of Position"

In a municipality there are many stakeholders who have different fields of responsibility, are affected by educational policy and outcomes in different ways and follow different goals and interests. In order to be successful, municipal education management must "understand" the specific constellation of stakeholders in the municipality. In other words, it must clarify which stakeholders, based on their fields of responsibility and competences, can make a contribution towards solving the problem. Furthermore, the relationship between the different stakeholders as well as their ability to exert influence must be well understood. Interests must be sounded out and balanced; the stakeholders must receive incentives and motivation to participate.

The broad involvement of stakeholders with the goal of discussing the problems and needs in the municipality in a wider circle, and thus produce a wide-ranging acceptance for the goals of municipal educational management, has proven successful. At the same time, it can be necessary to involve stakeholders who have the ability to exert significant influence through other means. Such solutions not only serve to capture the interests of the stakeholders, they also constitute an instrument of symbolic recognition. This results in a certain contradiction to the requirement of producing cross-boundary communication processes, for which treating actors equally plays a significant role. In this respect, municipal education management faces the task of bringing inclusive and exclusive practices in balance. For this purpose, continuous "relationship building" is necessary, in order to allay fears regarding possible disadvantages or negative effects from the cooperation.

Regulatory Area: "Knowledge-Based Management"

A central function of municipal education management is improving the knowledge basis for the management of the educational sector. It is assumed that the shared knowledge possessed by local stakeholders on problems and needs as well as on the other stakeholders in the educational sector increases the chances of a coordinated approach. In this process, educational monitoring forms the basis of establishing connections with the educational goals of the municipality and creating related coordination and cooperation processes. Education management and monitoring are required to present an overview of existing knowledge and knowledge carriers, selectively collect and analyse knowledge as well as support and spread the exchange of knowledge.

Knowledge management is not to be mistaken for a "technical" process that consists purely of the collection and analysis of data.[8] Data is not a purely objective language; the generation of knowledge is always closely related to subjective

[8]For a comprehensive discussion of educational monitoring as a social negotiation process, see Niedlich and Brüsemeister (2012).

interpretation processes. Cross-boundary cooperation is necessary in order to clarify which knowledge can be considered relevant, to gain access to required data and information, to be able to understand data and information, to discuss the knowledge gained, to draw conclusions and to feed knowledge into planning and decision processes. The stakeholders in municipal education management establish different ways of providing the right stakeholders with knowledge at the right point in time (which, however, is always vulnerable to failure).

A further element in this regulatory area is the appropriate preparation and distribution of monitoring results for the target group. The development or use of participative integration and decision-making processes, such as when compiling education reports in which central stakeholders read and comment on the individual parts, is considered particularly conducive to this process. The education report is marked as a shared product whose compilation involves various stakeholders. Furthermore, in order for the monitoring results to develop operative relevance, their targeted communication to policy-makers and the public is necessary. In this regard, educational conferences have become an established format for this type of communication. Educational monitoring can profit from public discussion in two respects: firstly, it can make its advantages for the municipality clear; secondly the debates can lead to new assignments for educational monitoring (for example in-depth analyses), which can further legitimise its actions.

Regulatory Area: "Visibility of Education Management"

First and foremost "Learning Locally" aims to improve the management of educational policy in municipalities through structural changes. Such changes require time. However, in order to secure support for municipal education management, it is important that the activities of municipal education management are also quickly made visible. One way of accomplishing this can be the creation of concrete products. In addition to the products discussed above, which result from educational monitoring, these products include educational development projects and their results (e.g. hand-outs, training concepts). Such "products" increase the appreciation for municipal education management, since its advantages are made tangible. At the same time, the development of products produces occasions for cooperation, thus promoting the networking efforts of municipal education management. However, the focus on fast results must not be allowed to lead to a failure to develop effective cooperation and management structures. If this were to be the case, the development of products would be more a form of blind actionism rather than a meaningful component of municipal education management. In this regard, municipalities must constantly deliberate, whether or not products are necessary, and if so which ones—or whether resources could potentially be more useful elsewhere. Ideally, products provide the starting point for further changes, for example when it becomes clear that an education catalogue cannot be organised

without additional support and as a result comprehensive decision-making processes are introduced.

Conclusion

This chapter analysed the development of municipal education management through a governance perspective. This approach proved to be productive because the questions raised by such programmes are also those that make up the core of governance research: the main concern at hand is motivating multiple stakeholders to approach problem-solving together—beyond the boundaries of organisations and areas of responsibility. The roles of individual actors as well their ability to exert influence are initially unclear and must be negotiated amongst those involved. The resulting aims are a shift away from traditional understandings of management, which assume certain political and administrative responsibilities. Through this shift, it is hoped to establish new regulatory structures that further the management possibilities of the municipality with regards to education. However, before this is possible, various regulatory areas must be addressed: municipal education management must be politically secured on the long-term; occasions and structures for cross-boundary cooperation must be developed, interests and perspectives must be communicated among the stakeholders, knowledge must be generated, shared and utilised and municipal education management must be made visible and gain acceptance.

The arguments in this chapter apply to municipal education management in the "Learning Locally" programme. It appears plausible, however, that similar processes could take place in other regional educational initiatives. Many of these initiatives apply to small-scale contexts (e.g. schools and their local environment) and it is to be assumed that the constellation of stakeholders is different. Last but not least, further possibilities for the participation of citizens can ensue (cf. Holtkamp et al. 2006). "Learning Locally" can also deliver interesting information for such contexts.

Bibliography

Altrichter, H., Brüsemeister, T., & Wissinger, J. (Eds.). (2007). *Educational Governance. Handlungskoordination und Steuerung im Bildungssystem*. Wiesbaden: VS.

Altrichter, H., & Maag Merki, K. (Eds.). (2010). *Handbuch Neue Steuerung im Schulsystem*. Wiesbaden: VS.

Benz, A. (2004a). Einleitung: Governance – Modebegriff oder nützliches sozial-wissenschaftliches Konzept? In A. Benz (Ed.), *Governance – Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 11–28). Wiesbaden: VS.

Benz, A. (2004b). Multilevel Governance – Governance in Mehrebenensystemen. In A. Benz (Ed.), *Governance – Regieren in komplexen Regelsystemen. Eine Einführung* (pp. 125–146). Wiesbaden: VS.

Berse, C. (2011). Kommunale Bildungslandschaften – Eine geeignete Konzeptfigur für die Förderung mehrdimensionaler Bildung? In P. Bollweg & H.-U. Otto (Eds.), *Räume flexibler Bildung. Bildungslandschaft in der Diskussion* (pp. 39–50). Wiesbaden: VS.

Birg, H. (2013). Bevölkerungsentwicklung. In *Bundeszentrale für politische Bildung*, p. 282.

Bollweg, P., & Otto, H.-U. (Eds.). (2011). *Räume flexibler Bildung. Bildungslandschaft in der Diskussion*. Wiesbaden: VS.

Brunsson, N. (1989). *The Organization of Hypocrisy: Talk, Decisions and Actions in Organizations*. Chichester: Copenhagen Buissness School Press.

BMBF - Bundesministerium für Bildung und Forschung (Ed.). (2008). *Bekanntmachung von Förderrichtlinien für das Programm "Lernen vor Ort"*, Bonn. http://www.lernen-vor-ort.info/_media/BMBF_Foerderrichtlinien_LVO_final.pdf. Accessed March 30, 2014.

Holtkamp, L., Bogumil, J., & Kißler, L. (2006). *Kooperative Demokratie. Das politische Potenzial von Bürgerengagement*. Campus: Frankfurt a. M.

Kussau, J., & Brüsemeister, T. (2007). *Governance, Schule und Politik. Zwischen Antagonismus und Kooperation*. VS: Wiesbaden.

Lindner, M., Niedlich, S., Klausing, J., & Brüsemeister, T. (2014). *Zum Aufbau von Arenen des Bildungsmanagements in "Lernen vor Ort"*.

Luthe, W. (2009). *Kommunale Bildungslandschaften. Rechtliche und organisatorische Grundlagen*. Berlin: Erich Schmidt.

Mayntz, R. (2001). Zur Selektivität der steuerungstheoretischen Perspektive. In H. P. Burth & A. Görlitz (Eds.), *Politische Steuerung in Theorie und Praxis* (pp. 17–27). Baden-Baden: Nomos.

Niedlich, S., & Brüsemeister, T. (2011). Modelle regionalen Bildungsmanagements – Ansätze zur Behebung sozialer und bildungsbezogener Ungleichheit? In F. Dietrich, M. Heinrich, & N. Thieme (Eds.), *Neue Steuerung – alte Ungleichheiten? Steuerung und Entwicklung im Bildungssystem* (pp. 201–218). Münster: Waxmann.

Niedlich, S., & Brüsemeister, T. (2012). Bildungsmonitoring zwischen Berichterstattung und Steuerungsanspruch – Entwicklungslinien und akteurtheoretische Implikationen. In A. Wacker, U. Maier, & J. Wissinger (Eds.), *Schul- und Unterrichtsreform durch ergebnisorientierte Steuerung – Empirische Befunde und forschungsmethodische Implikationen* (pp. 131–154). Wiesbaden: VS.

Weiß, W. (2011). *Kommunale Bildungslandschaften. Chancen, Risiken und Perspektiven.* Weinheim, Munich: Juventa.

Part IV
Education and the Region

Regionalization of Education

Marcus Emmerich

Abstract The chapter sketches out aspects of a critical social and educational regionalization research by dealing with the reference problems to which regionalization responds from a specific theoretical perspective: Starting with the distinction between *social integration* and *system integration*, it argues that regionalization presents a regulatory policy strategy of (post-)welfare state system integration, in the context of which education is redefined as a steering medium of social and economic policy. In conclusion, the question is discussed whether and to what extent regionalization is worth considering as one component of the solution to structural problems in the educational system.

Keywords Regionalization · Regionalization research · Educational regions · Educational landscape · Social integration · System integration · Inclusion/exclusion · Educational inequality

Over a period of just a few years, numerous *educational regions* and regional, local, and municipal *educational landscapes* have emerged across Germany. They bring together heterogeneous constellations of political and business actors, municipal and city-level school administrations, schools, youth services, vocational training and professional development organizations, social services, and other individuals and organizations, and involve a broad spectrum of programs, projects, measures, and actor-specific goals and interests. Strategic programs to promote the ongoing regionalization process in the educational sector include Baden-Württemberg's state-level "Educational Regions" Impulse Program and the federal-level "Learning in the Community" (*Lernen vor Ort*) program.

M. Emmerich (✉)
School of Education, Institute for Secondary Education,
University of Applied Sciences and Arts Northwestern Switzerland (FHNW),
Campus Brugg-Windisch, Bahnhofstrasse 6, 5210 Windisch, Switzerland
e-mail: marcus.emmerich@fhnw.ch

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Educational research is barely able to keep up with the momentum of these reforms, due partly to the complexity of the subject itself and partly to the institutionalized obstacles to interdisciplinary cooperation in many academic fields. What is still crucially lacking is an interdisciplinary theoretical framework that goes beyond the primarily political definitions of the problem and that could provide a basis for introducing and legitimizing regionalization as a means to explore possible avenues of reflection and to systematically formulate new research questions. Due to the complexity of the issue, however, this poses numerous methodical and methodological problems, particularly in the analysis of effects: For instance, there is currently no way to prove or disprove that, why, or whom regionalization actually helps. So if regionalization is the answer—what was the question?

This chapter attempts to sketch out a possible framework for 'critical' social and educational research on regionalization: Starting from the socio-theoretical distinction between *social integration* and *system integration*, we argue that regionalization is a governance strategy of *(post-)welfare state system integration* that takes its starting point at the municipal level and that entails redefining education as a *steering medium of social and economic policy regulation*. We then discuss the question of whether and to what extent regionalization can be considered a solution to existing structural problems in the educational system.

Systems Integration and Social Integration

The primary structure of modern society results, according to Luhmann, from the out differentiation of functional (sub-)systems like economy, politics, legislature, and education. This "disintegration" of the social system by "decoupling of functional systems" (Luhmann 2013, p. 25) would thus be the constitutive form of creating social structures that replaces segmentation (of tribal communities, settlement areas) and stratification (by status, class, stratum) as types of social differentiation. Functional differentiation evokes a structural break in operative interdependencies between, for example, science and the economy or politics and education. Yet this does not mean that segmentation or stratification disappear in modern society. Rather, they change *form*, since "chances of segmentation (e.g. on the basis of organizations) and self-reinforcing dissimilarities (e.g. between industrial countries and developing countries) grow with the complexity of the social system; and they arise precisely from functional systems such as the economic system or the education system using and thus enhancing similarities and dissimilarities as factors in the rationality of their own operations" (Luhmann 2013, p. 108). The system type *organization* in particular acts as a generator of segmentation: border regimes organized as nation-states, territorially organized government administrations, and the locations of industrial plants, hospitals, universities, etc. all have the effect of "spatializing" unequal access to services and functional systems. By distributing education and care services on local and regional level, also formal and informal educational organizations create topographies of inequality on-site and thus make

their own specific contributions to an organizationally based *spatialization of social inequalities* (Emmerich and Maag Merki 2010).

Following Lockwood (1964), one can use the distinction between the two basic problems modern societies have to cope with—that of *system integration*, which occurs when subsystems take on their own independent existence, and that of *social integration*, which addresses the incorporation of the individual *actor* into social systems (p. 245)—in order to explore if an why social disintegration derives from systems differentiation and "the organization of subsystems down to the last detail" (Schimank 2001, p. 23). Thus, while "social system integration" takes place, for example, in the form of "interorganizational networks spanning different subsystems" (ibid., p. 33), all of the subsystems—family, economy, politics, justice, morality, etc.—are responsible for the social integration of individuals. Luhmann (2013, p. 16ff) discussed this in terms of *inclusion*, but also emphasized that these systems are just as actively engaged in *exclusion*, that is, in the *social disintegration* of the individual. Here, systems either facilitate or prevent individual participation opportunities and access to the services they provide (such as education or medical care)—and that requires organization. The political system reacts to the *cumulative results of systems specific practices of exclusion* by organizing the "national welfare state" (Bommes 1999).

Based on their internal operations of inclusion and exclusion, organizations—as "engines of exclusion" (Nassehi 2004, p. 338)—generate a structured inequality that becomes socially *visible* as a result of its spatialization. Concerning the German education system, the visible result is well known: the "catholic working-class daughter" of the 1960s came from a rural area (Peisert 1967), while the disadvantaged "immigrant son" of today lives in an urban quarter (Geißler 2005). These statistical findings say little, however, about the *mechanisms of organized social disintegration*, and precisely these should be considered when exploring the possibilities and limits of regionalization in the educational system.

Regionalization in the (Post-)Welfare State

The nation-state wide reduction of regulatory capacities resulting from deregulation—a process that has been described using metaphors like "cooperative" (Ritter 1979; Mayntz 2004) or "activating" (Mezger and West 2000) state—has also created a lack of steering capability in the welfare state that is being compensated for increasingly at the municipal and local level, but that also involves delegation of authority to non-state and non-political regional actors. According to a core argument supporting the idea of regionalization, the complexity of social problems has to be reduced to a level on which these problems can be managed by available means of regulatory policy: "This is more likely at the municipal level: there are fewer problematic situations to deal with, and the interests of the different social groups can be pooled to work toward a cross-agency regulatory approach, in contrast to the frequently

uncoordinated policies of the different national and state government agencies" (Bogumil and Holtkamp 2004, p. 147).

This "renaissance of political steering at community level" (Dahme and Wohlfahrt 2009, p. 55) is driven by policy models such as *regional governance* (Fürst 2007) and *local governance* (Holtkamp 2007) that use quasi-market forms of coordination such as negotiations, contracts, and interorganizational networks and adapt these to different contexts including educational regions (Tibussek 2009). In general terms, regionalization can be described as a strategy for *integrating social subsystems*. Thus, it presents a functional equivalent to forms of *welfare state regulation* that are differentiated by government agencies (Kaufmann 2005). Although a shift is taking place from 'guidelines and directives' to 'negotiation, contracts, and networking' in the regional context, the regulatory goal remains that of system integration; the changes are merely in the modes and media of regulation.[1]

Regionalization and Education

Despite differing goals and approaches to regionalization (Emmerich 2011), system integration appears to be a key reference problem generally, and specifically in relation to education. As early as 1971, the German Educational Council proposed 'system-integrating' regionalization measures as a means of reorganizing school administrative structures (Bildungsrat 1971, p. 263), but it lasts until the 1995 recommendations of the Bildungskommission NRW (1995) that such proposals were finally addressed in policy reforms and implemented in the "Independent School North Rhine-Westphalia" (*Selbständige Schule NRW*) program (Holtappels et al. 2008). The establishment of *regional steering groups* (Berkemeyer 2007) and similar bodies is thus a reaction to the institutional (and organizational) separation between municipal and federal school administrations as well as school and youth services.

For municipal governments, regionalization offers greater educational policy responsibility and increased decision-making authority (Hebborn 2009), since regional networks avoid substantial intrusions into the formal structures of federal educational administration but allow problem-specific cooperation and pooling of resources. Politically risky structural reforms[2] can thus be replaced by "project-based" policies (Boltanski and Chiappello 2003) with limited scope and reversible,

[1]In the welfare sector, for instance, structures of "regulatory interpenetration" appear to establish themselves between social welfare associations and government administrative agencies, and do not so much reduce regulation as they do change the form of regulation (Heintze 2000, p. 44).

[2]The failure of the school reform undertaken by the CDU-Green coalition in Hamburg in 2010 bears witness to this.

partial solutions. This is particularly evident in the regional approaches to compensate for the transition problems typically emerging from tiered and tracked educational systems (Emmerich 2011).

According to Article 1, paragraph 2 of the German Spatial Planning Law (*Raumordnungsgesetz*, ROG), the task of spatial planning policy is to achieve "a sustained large-scale balance in regional structures, with equivalent living conditions in the constituent areas." Regionalization appears to imply a deviation in development strategy from this guiding principle: "Instead of working toward greater equality in regional living conditions, evaluated according to a common standard, the differences between contexts should be taken into account" (Benz and Fürst 2003, p. 21). This logic was already apparent in the recommendations of the Educational Commission of North Rhine-Westphalia: "equivalence in living conditions" was to be pursued through the "development of equivalent but differentiated educational landscapes in the educational regions" (Bildungskommission NRW 1995, p. 288f). But when the principle of equivalence is subordinated to a *principle of regional differentiation*, this underscores longstanding inequalities in interregional competition in the educational sector, placing educational regions under increased pressure to achieve effectiveness and efficiency, and changing the regional coordinates for *social integration* as well. Reflecting these developments, educational attainment is taking on ever-increasing importance as an element of social and economic policy on the municipal level:

> Furthermore, well-educated, creative, and imaginative people contribute to the preservation of any municipality. The educational attainment of the population is a decisive factor in the economic and social development of the regional location (BMBF 2014).

'Education' is thus redefined as a *social and economic policy steering medium* that is used to foster two forms of integration: first, social integration of educationally disadvantaged individuals through education, and second, integration of the educational and economic system 'on-site'. Paradoxically, socially 'disintegrated' individuals are supposed to be re-integrated into society through the integration of social subsystems, which—due to their internal rules of inclusion and exclusion—are in fact responsible for the individuals' social disintegration. As long as the possible causes of educational exclusion are ascribed to the excluded individuals themselves, and thus externalized, the paradox goes unnoticed: 'Educationally disadvantaged social classes' emerge 'in society' as it were, naturally, while educational organizations are supposed to react only 'preventatively' to the corresponding educational risks. According to Lepenies, "educational social policy" is a "policy field with a fundamentally preventative orientation" (Lepenies 2003, p. 23).

But even if the active role that local school structures play in socio-spatial segregation is taken into account, the mechanisms of exclusion by which the school system creates educational inequalities are merely seen as a secondary factor:

> Schools operate in a spatial and social respect as a mechanism of harsh segregation, whose effects are expressed not least of all in unsatisfactory educational outcomes (Baumheier and Warsewa 2009, p. 19).

The argument that the school system only ‘expresses’ social composition effects in student learning outcomes was made by Coleman as early as 1966. However, this argument overlooks the fact that ‘unsatisfactory educational outcomes’ are themselves a significant part of the school based mechanism of ‘harsh segregation’—in short: *social disintegration*.

Regionalization: Part of the Solution—Or Part of the Problem?

What are the implications of this? There is substantial empirical evidence that socio-regional disparities in access to the school and higher education system increase within the differentiated structure of regional educational system (Ditton 2007). Not only do substantial differences exist between the german federal states—for instance, in the above-average rates of special needs school attendance (with focus on learning support) among children from families with an immigration background (cf. Kornmann 2006)—they are also found at the regional level, for instance, between districts (cf. Weishaupt and Kemper 2009). Sociological studies on urban segregation mechanisms also attribute a catalytic role to schools (Baur and Häußermann 2009; Häußermann 2009).

In their regional study on “institutional discrimination”, Gomolla and Radtke (2002) attempted to demonstrate that, and explain why, regional networks of educational organizations appear as *part of the problem* leading to the emergence of educational inequality: Schools and school administrations make flexible use of a mechanism of “social closure” (Weber 1922/2005) that is evident, for example, when ‘ethnic background’ is used as a criterion to exclude young people competing for scarce spots at academic-track secondary schools.

For the analysis of regionalization in the educational system, this raises several important—but only empirically answerable—questions: How do regionally ‘networked’ educational organizations and professions generate social and educational problems in relation to the targets of their programs and services? What role do these networks of organizations play in the construction of ‘socio-spatial topographies’? And finally, what does this imply for processing inclusion and exclusion at the local or regional level? For example, if a community redefines the ‘educational risks’ the school system generates as future social integration risks and attributes these risks exclusively to underclass immigrant students, it enables itself to activate ready-made social welfare programs and social prevention policies which might lead into an extensive educational clientalization. Whether or not the kinds of social *and* system disintegration problems that emerge with the deregulation and marketization of the welfare sector can be compensated for depends on the extent to which regional actors are aware of these problems.

Thomson (2007) describes school based social disintegration patterns in England as “in/visible geographies of exclusion” (ibid., p. 126). ‘In/visible’ refers to the fact

that, while the effects of school exclusion are openly evident, the complex underlying mechanisms of exclusion remain unseen. In order to provide a research-based answer to the question of how regionalization in the educational system could contribute to solving social disintegration problems, it would be necessary to move from describing the visible to analyzing the underlying mechanisms (Radtke and Stošic 2008). Regionalization currently answers only the question to what extend local or regional steering policy conditions may define the possibilities and constraints for system integration. A convincing answer to the question of how to improve the structural conditions for social integration in the educational system is still lacking.

Bibliography

Baumheier, U., & Warsewa, G. (2009). Vernetzte Bildungslandschaften: Internationale Erfahrungen und der Stand der deutschen Entwicklung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 19–36). Wiesbaden: VS.

Baur, C., & Häußermann, H. (2009). *Ethnische Segregation in deutschen Schulen. Leviathan, 37* (3), 353–366.

Benz, A., & Fürst, D. (2003). Region – Regional Governance – Regionalentwicklung. In B. Adamaschek & M. Pröhl (Eds.), *Regionen erfolgreich steuern* (pp. 11–66). Gütersloh: Bertelsmann Stiftung.

Berkemeyer, N. (2007). Change Management durch regionale Steuergruppen? In N. Berkemeyer & H. G. Holtappels (Eds.), *Schulische Steuergruppe und Change Management* (pp. 201–220). Weinheim: Juventa.

Bildungskommission NRW. (1995). *Zukunft der Bildung – Schule der Zukunft*. Neuwied: Luchterhand.

Bildungsrat, D. (1971). *Empfehlungen der Bildungskommission: Strukturplan für das Bildungswesen*. Stuttgart: Klett.

Bleckmann, P., & Drudel, A. (Eds.). (2009). *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen*. Wiesbaden: VS.

BMBF – Bundesministerium für Bildung und Forschung. (2014). *Lernen vor Ort*. http://www.lernen-vor-ort.info/de/98.php. Accessed February 28, 2014.

Bogumil, J., & Holtkamp, L. (2004). Local Governance und gesellschaftliche Integration. In S. Lange & U. Schimank (Eds.), *Governance und gesellschaftliche Integration* (pp. 147–166). Wiesbaden: VS.

Boltanski, L., & Chiappello, E. (2003). *Der neue Geist des Kapitalismus*. Constance: UVK.

Bommes, M. (1999). *Migration im Wohlfahrtsstaat. Ein differenzierungstheoretischer Entwurf.* Wiesbaden: Westdeutscher Verlag.

Coleman, J. S. (1966). *Equality of Educational Opportunity*. Washington DC: US Government Printing Office.

Dahme, H.-J., & Wohlfahrt, N. (2009). Politische Steuerung in der Stadt. In F. Gesemann & R. Roth (Eds.), *Lokale Integrationspolitik in der Einwanderungsgesellschaft. Migration und Integration als Herausforderung für die Kommunen* (pp. 53–67). Wiesbaden: VS.

Ditton, H. (2007). Schulwahlentscheidungen unter sozial-regionalen Bedingungen. In O. Böhm-Kasper, C. Schuchart, & U. Schulzeck (Eds.), *Kontexte von Bildung. Erweiterte Perspektiven in der Bildungsforschung* (pp. 21–38). Münster: Waxmann.

Emmerich, M. (2011). Bildungsregion. In S. Rahm & C. Nerowski (Eds.), *Enzyklopädie Erziehungswissenschaft Online. Fachgebiet Schulpädagogik*. Beltz Juventa.

Emmerich, M., & Maag Merki, K. (2010). Regionale Bildungsräume – Koordinaten einer neuen Steuerung unter der Bedingung sozialer Disparitäten. *Recht der Jugend und des Bildungswesens – Zeitschrift für Schule, Berufsbildung und Jugenderziehung 58*(2), 144–157.

Fürst, D. (2007). Regional Governance. In A. Benz (Ed.), *Handbuch Governance: Theoretische Grundlagen und empirische Anwendungsfelder* (pp. 353–365). Wiesbaden: VS.

Geißler, H. (2005). Die Metamorphose der Arbeitertochter zum Migrantensohn. Zum Wandel der Chancenstruktur im Bildungssystem nach Schicht, Geschlecht, Ethnie und deren Verknüpfungen. In P. Berger & H. Kahlert (Eds.), *Institutionalisierte Ungleichheiten. Wie das Bildungswesen Chancen blockiert* (pp. 71–100). Weinheim, Basel: Beltz Juventa.

Gomolla, M., & Radtke, F.-O. (2002). *Institutionelle Diskriminierung. Die Herstellung ethnischer Differenz in der Schule*. Opladen: Leske & Budrich.

Häußermann, H. (2009). Segregation von Migranten, Integration und Schule. In Friedrich-Ebert-Stiftung (Ed.), *Einwanderungsgesellschaft Deutschland. Wege zu einer sozialen und gerechten Zukunft*. WISO Diskurs – Expertisen und Dokumentationen zur Wirtschafts- und Sozialpolitik (pp. 89–98). http://library.fes.de/pdf-files/wiso/06661.pdf. Accessed July 8, 2014.

Hebborn, K. (2009). Bildung in der Stadt: Bildungspolitik als kommunales Handlungsfeld. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 221–231). Wiesbaden: VS.

Heintze, R. G. (2000). Inszenierter Korporatismus im sozialen Sektor. Politische Steuerung durch Vernetzung. In H.-J. Dahme & N. Wohlfahrt (Eds.), *Netzwerkökonomie im Wohlfahrtsstaat. Wettbewerb und Kooperation im Sozial- und Gesundheitssektor*. Berlin: Edition Sigma.

Holtappels, H.-G., Klemm, K., & Rolff, H.-G. (Eds.). (2008). *Schulentwicklung durch Gestaltungsautonomie. Ergebnisse der Begleitforschung zum Modellvorhaben "Selbstständige Schule" in Nordrhein-Westfalen*. Münster: Waxmann.

Holtkamp, L. (2007). Local Governance. In A. Benz, S. Lütz, & G. Simonis (Eds.), *Handbuch Governance. Theoretische Grundlagen und empirische Anwendungsfelder* (pp. 366–377). Wiesbaden: VS.

Kaufmann, F. X. (2005). *Sozialpolitik und Sozialstaat. Soziologische Analysen* (2nd ed.). Wiesbaden: VS.

Kornmann, R. (2006). Die Überrepräsentation ausländischer Kinder und Jugendlicher in Sonderschulen mit dem Schwerpunkt Lernen. In G. Auernheimer (Ed.), *Schieflagen im Bildungssystem. Die Benachteiligung der Migrantenkinder* (pp. 71–85). Wiesbaden: VS.

Lepenies, W. (2003). Bildungspathos und Erziehungswirklichkeit. In N. Killius, J. Kluge, & L. Reisch (Eds.), *Die Bildung der Zukunft* (pp. 13–31). Frankfurt a. M.: Suhrkamp.

Lockwood, D. (1964). Social integration and system integration. In G. K. Zollschan & W. Hirsch (Eds.), *Explorations in Social Change* (pp. 244–257). London: Routledge.

Luhmann, N. (2013). *Theory of Society* (Vol. II). Stanford: University Press.

Mayntz, R. (2004). Governance im modernen Staat. In A. Benz (Ed.), *Governance – Regieren in komplexen Mehrebenensystemen. Eine Einführung* (pp. 65–76). Wiesbaden: VS.

Mezger, E., & West, K. (Eds.). (2000). *Aktivierender Sozialstaat und politisches Handeln*. Marburg: Schüren.

Nassehi, A. (2004). Inklusion, Exklusion, Ungleichheit. Eine theoretische Skizze. In T. Schwinn (Ed.), *Differenzierung und soziale Ungleichheit. Die zwei Soziologien und ihre Verknüpfung* (pp. 323–352). Frankfurt a. M.: Humanities Online.

Peisert, H. (1967). *Soziale Lage und Bildungschancen in Deutschland*. Munich.

Radtke, F.-O., & Stošić, P. (2008). 'Sozialraum' und 'Netzwerke'. Semantiken kommunaler Integrationspolitik. In M. Bommes & M. Krüger-Potratz (Eds.), *Migrationsreport 2008. Fakten – Analysen – Perspektiven* (pp. 77–112). Frankfurt, New York: Campus.

Ritter, E. H. (1979). Der kooperative Staat. Bemerkungen zum Verhältnis von Staat und Wirtschaft. *Archiv des öffentlichen Rechtes, 104*, 389–413.

Schimank, U. (2001). Funktionale Differenzierung, Durchorganisierung und Integration der modernen Gesellschaft. In V. Tacke (Ed.), *Organisation und gesellschaftliche Differenzierung* (pp. 19–38). Wiesbaden: Westdeutscher Verlag.

Thomson, P. (2007). Working the in/visible geographies of school exclusion. In K. N. Gulson & C. Symes (Eds.), *Spatial Theories of Education: Policy, Geography and Theory* (pp. 111–129). New York: Routledge.

Tibussek, M. (2009). Netzwerkmanagement: Steuerung in Bildungslandschaften. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 203–220). Wiesbaden: VS Verlag.

Weber, M. (1922/2005). *Wirtschaft und Gesellschaft. Grundriss der verstehenden Soziologie*. Frankfurt a. M.: Zweitausendeins.

Weishaupt, H., & Kemper, T. (2009). Zur nationalitätenspezifischen und regionalen Bildungsbenachteiligung ausländischer Schüler unter besonderer Berücksichtigung des Förderschulbesuchs. In I. Sylvester, I. Sieh, M. Menz, H.-W. Fuchs, & J. Behrendt (Eds.), *Bildung, Recht, Chancen* (pp. 97–111). Münster: Waxmann.

The Relevance of Educational Landscapes for Regional and Urban Development

Mario Tibussek

Abstract Education is increasingly being seen as key lever used to deal with major social challenges. At the same time, greater focus is being placed on local and regional aspects, as a reaction to globalisation, which also means a greater focus on urban and regional development. This text starts out from the increasing relevance of education, which can be understood as a cross-sectional topic. The relationship between education and urban/regional development is at the heart of the analysis, which is based on two central theories: education is relevant on an urban/regional level, and (2) urban/regional development is relevant to education. Based on this interaction, the investigation studies the extent to which the strategies belonging to educational landscapes and urban/regional development are compatible. This means a description both of commonalities in the approaches and synergies and of conceptual insufficiencies.

Keywords Governance · Educational landscapes · Urban development · Educational spaces · Social space · Lifeworld · Municipality · Local · Regional

In 1957 the architectural sociologist Lucius Burckhardt asked the question, "Is it not, indeed, strange […] that the public does not take a public interest in the appearance of towns and cities?" (Burckhardt 1980, p. 19). The implicit assertion in this question can today no longer go unchallenged at a time when, for example, there was a referendum in Berlin on how the area of the old Tempelhof airport should be used. However, the question is very much still current, in an altered form: is it not, indeed, strange that the public does not take a public interest in the link between the city and educational processes, and the way children and young people grow up?

In Germany, it is only in recent years that there has been a huge leap in the significance of education as a topic related to the development of regions, towns

M. Tibussek (✉)
Deutsche Kinder- und Jugendstiftung, Tempelhofer Ufer 11, 10963 Berlin, Germany
e-mail: mario.tibussek@dkjs.de

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and cities, with the concept of "educational landscapes" providing a framework for discussion on integrated local education. So far, the "educational landscape" approach, which is predominantly treated with hope, has not been able to unlock its full potential. Though the concept promotes networks between educational institutions and cooperation between a wide range of educational actors, in practice there are still too few links between the educational landscape approach and other disciplines, departments and fields of life.

Mutual Relevance of Education and Urban/Regional Development

This chapter discusses the question of what effect education can have on a region, and what mutual connections can arise from the corresponding strategies of educational landscapes, on one hand, and urban/regional development, on the other. Generally, education's relevance for the city and region is explained in economic terms, not infrequently focusing on problems and preventing "huge resulting social costs" (Meier 2008, p. 15). Municipal actors' motives for concentrating more on education can frequently be traced back to this argument, or to improving education as a locational pull factor (cf. Tibussek 2008).

There has also been frequent discussion on the visible relevance of the effect on spaces wielded by places of education: there are already targeted attempts to make use of such places' establishment, closure, merging, linking or institutional and physical opening up to their surroundings. For example, what happens to urban spaces if individual schools stop being closed off and become "heteropias" (Foucault 1986, p. 26)? In the town of Bernburg in Saxony-Anhalt, which wanted to rein in the demographic changes which had had grave effects on the town through concentric shrinkage, there were plans to shape the town centre by integrating an open school campus, i.e. one with no physical boundaries. One aim was for this to bring new life to the town centre; the other was to make the school an integral part of urban social space by providing certain elements which the entire population could access and use. The following will now explore in greater detail the question of what effect the extended understanding of the process of education has on urban and regional development. This broader definition of the term "education" and the "perspective of the learning subject" emphasised in the educational landscape approach (the perspective as defined by Bleckmann and Durdel 2009, p. 12), shift the focus onto actions which affect spaces. Here, the example used will be the simplified representation of a section from the educational world of a fictitious adolescent, 16-year-old Emre (see Fig. 1).[1] The diagram presents spaces and activities involving education, in the broader sense.

[1]The diagram is not intended to represent a space. This would contradict the discourse on space explained in further detail later.

Here, education is divided according to the established pattern into formal education (e.g. school learning), non-formal education (e.g. learning at music school) and informal education (e.g. learning at the cinema or through activities such as making pirate copies).

Emre largely educates himself (use of the reflexive is deliberate) independently of any pre-determined settings. Children and young people use the spaces open to them in a way that is at odds with the functions defined and pre-set by adults: children play and learn not only in the play areas and places of learning intended for them but, as "keen researchers" (Malaguzzi 1984, p. 4) everywhere, all of the time. Adolescents do not only learn in clearly definable places of education, either. For example, through acts of informal learning "in the wild" (Böhnisch and Schröer 2001, p. 185f) such as parkour, skateboarding or spraying graffiti, Emre appropriates his educational environment and redesignates it for his own purposes. In this way, young people have always managed to use even "non-places" (Augé 1994) for themselves and, as the photographer Tobias Zielony described it, invented a "form of social activity in passing" (quoted in Zitzewitz 2007, p. 97).

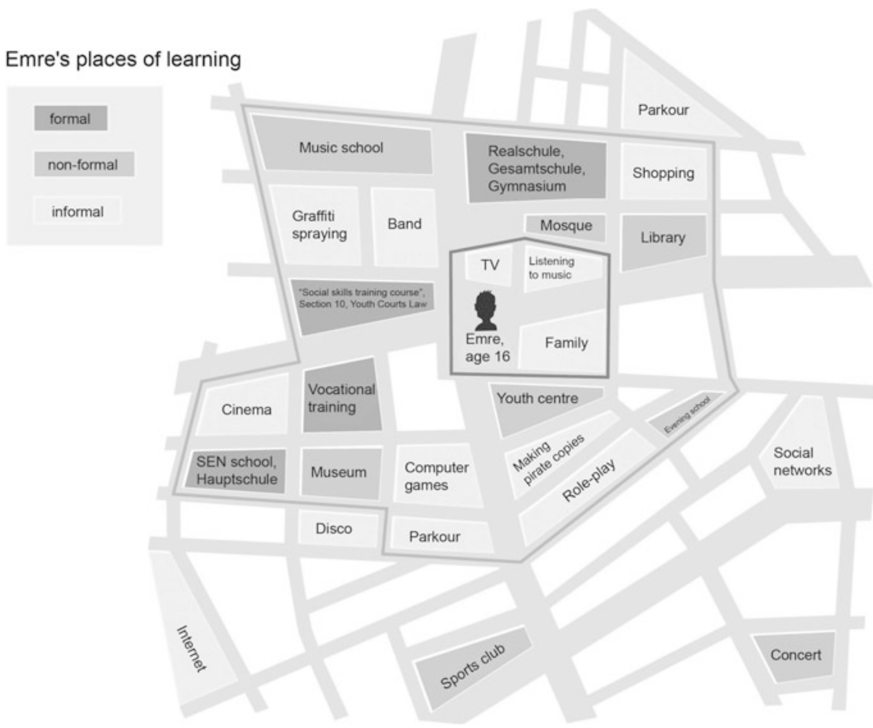

Fig. 1 Emre's educational world (*Source* Own representation)

If, as Selle (2012, p. 27) emphasises, “we all” develop towns and cities, then children and young people are particularly active in this. In the context of the broader sense of education, their actions are described as education, in the sense of educating themselves: as a social educational process which prioritises individual constructive efforts (cf. Frey 2004, p. 219). The triad of effects exerted by children and young people as actively learning subjects, by education as a location’s pull factor and by educational places and institutions can thus be summed up as follows: “Education is relevant to [regional and] urban development” (Tibussek 2012, p. 8).

Viewed from the perspective of the theory of space, this conclusion can be understood as follows. On one hand, space is the product of social practice (e.g. cf. Löw 2001, p. 172; Werlen 2005, p. 9); on the other, in the fields of social geography and the sociology of space, space is defined not only as a social construct, but also as a producer of social reality (e.g. cf. Bourdieu 1991), i.e. ultimately created through interplay between the subject, social processes and territoriality. In the case of educational spaces, however, it is not (or not only) physical, geographical circumstances which should be examined, i.e. the question “What effect do spaces have on Emre?” The much-cited “space as a third teacher” (alongside fellow pupils and teachers) is surprisingly often interpreted in a narrow sense, in terms of physical architecture (cf. von der Beek 2001, p. 197; Dreier 2004, p. 137). The Reggio Emilia approach, by contrast, from which this solution is borrowed, sees it in a broader sense, as the whole urban and suburban space. Here, space is a construct to which the children themselves contribute (cf. Reggio Children 2002). The theory of space and educational science are consequently less interested in pre-set circumstances, and more interested in those that can be shaped. Along with social contexts (cf. Thuswald 2010, p. 22), these are “the respective content, choices and range of possible actions” (Radtke and Stošic 2009, p. 46).

This approach gives urban development an enabling component (re spaces for enablement see Böhnisch and Schröer 2002, p. 184). This comes close to the effect which teachers have as enablers: the process of “educating oneself” cannot be produced, let along forced upon anyone. It can only be enabled. If, as has been set out here, urban development has an equally enabling effect on the education process, it can be said that “[regional and] urban development is of educational relevance” (Tibussek 2012, p. 7).

Compatibility of Educational Landscapes and Urban/Regional Development

So far, this chapter has analysed the mutual relationship between education and urban/regional development. What now follows is an examination of what this means for local implementation, and of the extent to which educational landscapes and urban/regional development are compatible.

Governance Perspective

Both the educational landscape approach and urban/regional development—at least in their modern interpretation, which is distinguished from conventional planning (cf. Selle 2010)—draw upon network approaches taken from the discourse on governance. This is based on the assumption that "the actions of multiple actors within a space still have combined effects even if they are not explicitly related to one another" (Tibussek 2009a, p. 203f). The aim is for the governance perspective to help bridge the gap between an integrated approach, on one hand, and functional pillarisation or isolation, with their silo effects, on the organisational side (cf. Tibussek 2013, p. 5ff). This is shown in Fig. 2 based on the example of the education process.

This means that the adaptation of structures and processes following the governance perspective, in a bid to achieve coherence, can be seen as an enabling strategy. These attempts at reform should not be viewed as a new project, but are—with their ability to be adapted and updated to meet new requirements—a long-term venture. For the governance perspective which is to be used to manage this, one crucial observation is that, similarly to the regime approach (cf. DiGaetano and Klemanski 1993; Mossberger and Stoker 2001), the actors responsible for it are not

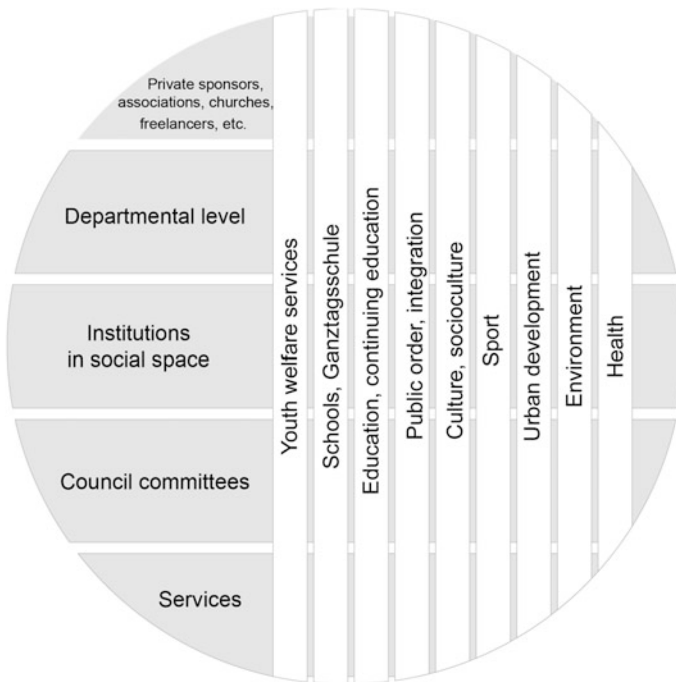

Fig. 2 Isolated lifeworld (*Source* Own representation based on Hörrmann and Tiby 1991; Vahs 2005; Schubert 2008)

only from a public but also from a private background. However, responsibilities for coordinating urban/regional development and educational landscapes are integrated into the structures whose logic they are actually intended to replace. With regard to this dilemma, Sennett (2012, p. 20) observes that "In principle, every modern organisation favours cooperation. In practice, however, the structure of modern organisations hinders that cooperation."

Interdisciplinarity

Cooperative ventures arising from the governance perspective bring with them the challenge of interdisciplinarity. During cooperation in practice, interdisciplinarity also involves a form of interculturalism, expressed as different specialist languages and ways of thinking. In contrast to the decades of conflict in cooperation between schools and the youth welfare services, no dissent can be observed between education and urban development which might shake the foundations of each discipline's self-understanding, meaning that though bringing the two disciplines together is a task to be tackled, it is not a problem.

Spatial Aspect

The aspect of space on a small scale is constitutive for bringing together education and urban/regional development. Another shared trait is a fundamental focus on the active subject. Though the strategies of both educational landscapes and urban/regional development emphasise a spatial aspect, it is precisely in that regard that compatibility cannot be found between educational landscapes and urban/regional development. This requires a closer examination of the differences in their understanding of space.

In the discourse on educational landscapes, a certain helplessness can be observed when it comes to delineating spaces—it is almost arbitrary. With good will, the differentiation can be understood such that "local" means "nearby" and "regional" is a rather larger spatial context within which the local is embedded. "Municipal", meanwhile, defines the spatial context from the point of view of limits of responsibility. However, none of these attempts to distinguish between the characteristics ascribed to spaces by educational landscape contexts help escape the fact that they all have one thing in common: a Newtonian concept of an absolute space which "remains always similar and immovable" (Newton 1988, p. 44). This ignores the interplay described above, where space is both a product of social practice and a producer of social reality.

However, the actors in the discourse on educational landscapes are not alone in this view of space which might be better placed in the modernity (Beck 1997, p. 49ff; see also Bauman 1992). In youth welfare practice, "demarcating and

labelling parts of the programme or 'social spaces' largely remains an administrative concern" (Franke 2011, p. 192), which goes against the idea of social spaces. The construct of social problem areas (*soziale Brennpunkte*; cf. Deutscher Städtetag 1979, p. 12), which was used as the basis for intervention in urban development for decades, treated the spatially observable form of social expression as a reason, or even the cause, for a social process, as if the place where problematic social circumstances were expressed was the social problem itself (cf. Werlen 2010, p. 257). Thus, political interventions, aligned towards the spatial form in which social issues were expressed, aimed at social problem areas being cleaned up by means of measures centring on those spaces (cf. ibid. and Dirks and Kessl 2012, p. 10f). Häußermann (2001, p. 38) compared this with the image of a fire brigade fighting the causes of a fire.

At a higher level of abstraction, too, governance-related discourses have fallen behind the current state of the debate on space in urban/regional development. For example, in terms of management, though the "urban regimes" have now been brought up to a point where, like "policy networks" (Mayntz 1996, p. 473), they necessarily include private actors (cf. Mossberger and Stoker 2001), here, too, the focus on the municipal "container space" as a management space prevents a regional outlook on space (cf. Bahn et al. 2003, p. 2). It is as if the regional governance approaches, according to which space is specifically not described using the fixed borders of a regional authority but as a "spatial context whose scope is in fact flexible" (Benz et al. 1999, p. 25), have not been taken in.

What reasons could there be for this? With this view of space, the congruence between an educational space and a clearly delineated municipal authority area makes work easier (cf. Werlen 2010, p. 225). This becomes especially clear when the many subjective spaces are taken into consideration. While Emre allows his space to take shape through his activities, another adolescent will be constructing her own space through her activities. Yet that is precisely why "there is good reason to doubt whether administrative, state delineations do indeed take sufficient account of the interests and needs of the population" (Luthe 2009, p. 71f). To that extent, though the difficulties in transposing an appropriate concept of space into the management structures of strategies for educational landscapes and urban/regional development are understandable, they can be overcome.

What is required is a balancing act: thinking from the point of view of the learning subject and acting from the point of view of a governance perspective coordinated by administrative means (cf. Tibussek 2009b, p. 107). The spatial delineations required for educational landscapes and urban/regional development bring with them two challenges. On one hand they need to do justice to the dynamics of spatial constructs which are capable of change. On the other, they need to look out for the fine details of contexts. Luthe (2009, p. 72), for example, points out that even the point behind social spaces (social integration) and the key intention of educational spaces (learning progress) are an indication of differences.

The management structure aimed at can be seen as a series of "constantly produced and reproduced interwoven fabric of social practices" (Kessl and Reutlinger 2010, p. 20). Here, the structure of the fabric represents not only its

heterogeneity but also a relative stability (ibid.). This image suggests a regionalisation in which the region becomes another level of action in the political system, with "the existing organisation of the state into the federation, Länder and municipalities is extended, without 'the region' having to undergo a fixed institutionalisation" (Kilper 2010, p. 15f). This "detour" from the state's administrative spatial divisions makes it easier to enter into additional cooperative ventures which overstep the borders of the sector set out by the state, business and civil society and—a point which is particularly important in the field of education—those at the federal level.

The question remains of how the regionalisation of educational spaces at the point where educational landscapes meet urban/regional development can be carried out in a managed way. So far, few models have been proposed which have attempted to make possible the balancing act described above between the focus on the subject and a management structure. Among other things, there have been attempts to derive a typology from subjective educational spaces, as practised, for example, in research into activity spaces (cf. Scheiner 1998, p. 60) or the lifeworld model developed by the Sinus Institute (Calmbach et al. 2012). Another approach consists in taking the complicated route from the "subjectively meant sense to objective factuality" (Berger and Luckmann 1987, p. 20). Thus, in the model of "proto-governance" (Christmann 2010), there is an attempt to use communication to achieve an intersubjective, "collective" interpretation of space, the shape and content of which form the basis for structures from the governance perspective (ibid., p. 32f).

Whatever form the solution may take, it seems clear that for a spatial aspect based on the learning subject, skills will be required from the angles of both education and urban/regional development. This underlines the repeatedly stressed need, in order to improve the way in which children and young people grow up, not only to link education and urban development but also to align their strategies such that the two approaches can learn from one another and, through their combined efforts, take even more effective action. Education, whose effects are always felt in the future, can thus reinforce the sustainability which is already present in the structures of enablement (viewed from the governance perspective) of both approaches: educational landscapes and urban/regional development.

Bibliography

Augé, M. (1994). *Orte und Nicht-Orte. Vorüberlegungen zu einer Ethnologie der Einsamkeit*. Frankfurt a. M.: S. Fischer.

Bahn, C., Potz, P., & Rudolph, H. (2003). *Urbane Regime – Möglichkeiten und Grenzen des Ansatzes*. Discussion Paper SP III 2003-201. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.

Bauman, Z. (1992). *Moderne und Ambivalenz – Das Ende der Eindeutigkeit*. Hamburg: Junius.

Beck, U. (1997). *Was ist Globalisierung? Irrtümer des Globalismus – Antworten auf Globalisierung*. Suhrkamp: Frankfurt a. M.

Benz, A., Fürst, D., Kilper, H., & Rehfeld, D. (1999). *Regionalisierung. Theorie – Praxis – Perspektiven*. Opladen: Leske & Budrich.

Berger, P. L., & Luckmann, T. (1987). *Die gesellschaftliche Konstruktion von Wirklichkeit. Eine Theorie der Wissenssoziologie*. Frankfurt a. M.: S. Fischer.

Bleckmann, P., & Durdel, A. (Eds.). (2009). *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen*. Wiesbaden: VS.

Böhnisch, L., & Schröer, W. (2001). *Pädagogik und Arbeitsgesellschaft. Historische Grundlagen und theoretische Ansätze für eine sozialpolitisch reflexive Pädagogik*. Weinheim: Juventa.

Böhnisch, L., & Schröer, W. (2002). *Die soziale Bürgergesellschaft. Zur Einbindung des Sozialpolitischen in den zivilgesellschaftlichen Diskurs*. Weinheim: Juventa.

Bourdieu, P. (1991). Physischer, sozialer und angeeigneter physischer Raum. In M. Wentz (Ed.), *Stadt-Räume* (pp. 25–34). Frankfurt a. M., New York: Campus.

Burckhardt, L. (1980). *Wer plant die Planung? Architektur, Politik und Mensch*. Kassel: Martin Schmitz.

Calmbach, M., Thomas, P. M., Borchard, I., & Flaig, B. (2012). *Wie ticken Jugendliche? Lebenswelten von Jugendlichen im Alter von 14 bis 17 Jahren in Deutschland*. Düsseldorf: Verlag Haus Altenberg.

Christmann, G. B. (2010). Kommunikative Raumkonstruktionen als (Proto-)Governance. In H. Kilper (Ed.), *Governance und Raum* (pp. 27–48). Baden-Baden: Nomos.

Deutscher Städtetag (Ed.). (1979). *Hinweise zur Arbeit in sozialen Brennpunkten*. DST-Beiträge zur Sozialpolitik, Reihe D/10. Cologne.

DiGaetano, A., & Klemanski, J. (1993). Urban regimes in comparative perspective: The politics of urban development in Britain. *Urban Affairs Quarterly, 29*(1), 54–83.

Dirks, S., & Kessl, F. (2012). Räumlichkeit in Erziehungs- und Bildungsverhältnissen. In U. Bauer, U. Bittlingmayer, & A. Scherr (Eds.), *Handbuch Bildungs- und Erziehungssoziologie* (pp. 507–526). Wiesbaden: VS.

Dreier, A. (2004). Raum als Dritter Erzieher. In S. Lingenauber (Ed.), *Handlexikon der Reggio-Pädagogik* (pp. 135–141). Bochum: Projekt Verlag.

Foucault, M. (1986). Of other spaces. *Diacritics* 16/1, Spring, pp. 22–27.

Franke, T. (2011). *Raumorientiertes Verwaltungshandeln und integrierte Quartiersentwicklung. Doppelter Gebietsbezug zwischen "Behälterräumen" und "Alltagsräumen"*. Wiesbaden: VS.

Frey, O. (2004). Urbane öffentliche Räume als Aneignungsräume. Lernorte eines konkreten Urbanismus. In U. Deinet & C. Reutlinger (Eds.), *"Aneignung" als Bildungskonzept der Sozialpädagogik* (pp. 219–233). Wiesbaden: VS.

Häußermann, H. (2001). Aufwachsen im Ghetto? In K. Bruhns & W. Mack (Eds.), *Aufwachsen und Lernen in der Sozialen Stadt. Kinder und Jugendliche in schwierigen Lebensräumen* (pp. 37–51). Opladen: Leske & Budrich.

Hörrmann, G., & Tiby, C. (1991). Projektmanagement richtig gemacht. In A. D. Little (Ed.), *Management der Hochleistungsorganisation* (pp. 73–91). Wiesbaden: Gabler.

Kessl, F., & Reutlinger, C. (2010). *Sozialraum. Eine Einführung*. Wiesbaden: VS.

Kilper, H. (2010). Governance und die soziale Konstruktion von Räumen. Eine Einführung. In H. Kilper (Ed.), *Governance und Raum* (pp. 9–24). Baden-Baden: Nomos.

Krüger, T. (2007). Alles Governance? Anregungen aus der Management-Forschung für die Planungstheorie. *RaumPlanung, 132/133*, 125–130.

Löw, M. (2001). *Raumsoziologie*. Suhrkamp: Frankfurt a. M.

Luthe, E.-W. (2009). *Kommunale Bildungslandschaften. Rechtliche und organisatorische Grundlagen*. Berlin: Erich Schmidt.

Malaguzzi, L. (1984). *Zum besseren Verständnis der Ausstellung: 16 Thesen zum pädagogischen Konzept*. Berlin: FIPP.

Mayntz, R. (1996). Policy-Netzwerke und die Logik von Verhandlungssystemen. In P. Kenis & V. Schneider (Eds.), *Organisation und Netzwerk. Institutionelle Steuerung in Wirtschaft und Politik* (pp. 471–496). Frankfurt a. M., New York: Campus.

Meier, J. (2008). Die Bedeutung von Bildung in der Region. In C. Stern, C. Ebel, V. Schönstein & O. Vorndran (Eds.), *Bildungsregionen gemeinsam gestalten. Erfahrungen, Erfolge, Chancen* (pp. 14–17). Gütersloh: Bertelsmann.

Mossberger, K., & Stoker, G. (2001). The evolution of urban regime theory: The challenge of conceptualization. *Urban Affairs Review, 36*(6), 810–835.

Newton, I. (1988). *Mathematische Grundlagen der Naturphilosophie*. Hamburg: Meiner.

Radtke, F.-O., & Stošić, P. (2009). Lokale Bildungsräume: Ansatzpunkte für eine integrative Schulentwicklung. *Geographische Revue, 1*, 34–51.

Reggio Children (Ed.). (2002). *Hundert Sprachen hat das Kind. Das Mögliche erzählen. Kinderprojekte der städtischen Krippen und Kindergärten von Reggio-Emilia.* Neuwied: Luchterhand.

Scheiner, J. (1998). Aktionsraumforschung auf phänomenologischer und handlungstheoretischer Grundlage. *Geographische Zeitschrift, 86/1*, 50–66.

Schubert, H. (2008). Netzwerkkooperation – Organisation und Koordination von professionellen Vernetzungen. In H. Schubert (Ed.), *Netzwerkmanagement. Koordination von professionellen Vernetzungen – Grundlagen und Praxisbeispiele* (pp. 7–105). Wiesbaden: VS.

Selle, K. (2010). Neu denken! Warum die alte Planungstheorie ein "Motorrad" ist. In J. Sulzer (Ed.), *IntraURBAN: Stadt erfinden, erproben, erneuern. Stadtentwicklung und Denkmalpflege* (Vol. 13, pp. 14–23). Berlin: Jovis.

Selle, K. (2012). Stadtentwicklung aus der "Governance-Perspektive": Eine veränderte Sicht auf den Beitrag öffentlicher Akteure zur räumlichen Entwicklung – früher und heute. In U. Altrock & G. Bertram (Eds.), *Wer entwickelt die Stadt? Geschichte und Gegenwart lokaler Governance. Akteure – Strategien – Strukturen.* Urban Studies (pp. 27–48). Bielefeld: transcript.

Sennett, R. (2012). *Zusammenarbeit. Was unsere Gesellschaft zusammenhält*. Berlin: Hanser.

Thuswald, M. (2010). Situiert involviert. In M. Thuswald (Ed.), *Urbanes Lernen. Bildung und Intervention im öffentlichen Raum* (pp. 15–23). Vienna: Löcker.

Tibussek, M. (2008). Bildung als Standortfaktor – Kommunale Bildungslandschaften als Beitrag zur nachhaltigen Regionalentwicklung. *Ländlicher Raum (Zeitschrift der Agrarsozialen Gesellschaft e. V. Göttingen) 3/4*, 7–11.

Tibussek, M. (2009a). Netzwerkmanagement. Steuerung in Bildungslandschaften. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 203–220). Wiesbaden: VS.

Tibussek, M. (2009b). Wie lassen sich Sozialraumorientierung und Kommunalisierung in Bildungslandschaften miteinander vereinbaren? In vhw – Bundesverband für Wohnen und Stadtentwicklung e. V. (Ed.), *Urbane Landschaften I. Lernlandschaften durch das Engagement von Stadt, Unternehmen (CSR) und Bürgerschaft. Tagungsband November 2009* (pp. 106–108). Berlin.

Tibussek, M. (2012). *Die Stadt und ihre Kinder. Stadtentwicklung und Bildungslandschaften.* A presentation at the 7th forum of the Essen Forum Baukommunikation in cooperation with Stiftung Bauhaus Dessau on 17/18 May 2011 in Dessau. http://www.lokale-bildungslandschaften.de/fachdiskurs/fachtagungen/stadtentwicklung-und-bildungslandschaften.html#c2431. Accessed March 11, 2014.

Tibussek, M. (2013). *Schritte zur Entwicklung und Umsetzung kommunaler Strategien für Schulerfolg*. Magdeburg: Zentrale Koordinierungsstelle "Schulerfolg".

Vahs, D. (2005). *Organisation. Einführung in die Organisationstheorie und -praxis*. Stuttgart: Schäffer-Poeschel.

von der Beek, A. (2001). Der Raum als 3. *Erzieher. PÄD Forum, 3*, 197–202.

Werlen, B. (2005). Raus aus dem Container! Ein sozialgeographischer Blick auf die aktuelle (Sozial-)Raumdiskussion. Project "Netzwerke im Stadtteil" (Ed.), *Grenzen des Sozialraums. Kritik eines Konzepts – Perspektiven für Soziale Arbeit* (pp. 15–35). Wiesbaden: VS.

Werlen, B. (2010). *Gesellschaftliche Räumlichkeit 2. Konstruktion geographischer Wirklichkeiten*. Franz Steiner: Stuttgart.

Zitzewitz, J. (2007). Eine beiläufige Form des Sozialen. *ARCH+ 183*, 97–99.

Regional Contexts in Quantitative Educational Sociology

Alexandra Wicht

Abstract In recent years, quantitative empirical researchers in the field of educational sociology have become increasingly interested in not only *whether*, but more importantly *how exactly*, regional contexts have a bearing on educational outcomes. However, these analyses often exhibit a tension between theoretical conceptualization on the one hand and operationalization of regional contexts on the other: while, on a theoretical level, regional contexts are seen as constituted by patterns of social interaction with blurred boundaries, in contextual analyses, they are typically operationalized as "absolute" (administrative) *places* that are independent of each other. Starting from a concept of space rooted in geography, I advocate for an understanding of regional contexts that takes into account spatial relations of social phenomena in terms of social interrelations and exchange. If such spatial interdependencies are present conventional hierarchical models become inadequate. I demonstrate the extent of spatial interdependencies by looking at the example of data on youth unemployment on the level of districts (*Landkreise*).

Keywords Sociology of education · Youth unemployment · Context effects · Multi-level analysis · Commuting flows · Spatial interdependence · Regional analyses · Spatial analysis

Social behavior and, hence, social phenomena and processes are not just structured in terms of time, but are also *localized* somewhere, i.e., take place at a certain time *in a certain location*. In light of this insight, social scientists, and educational sociologists in particular, have in recent decades increasingly become interested in regional and local contexts (in this paper I will mainly focus on regional contexts). Regional contexts are both the setting for and the result of social action. For this reason, there is no doubt that their integration into empirical social research provides an important contribution to understanding the development of social inequalities.

A. Wicht (✉)
Faculty of Arts, Sociology, University of Siegen, Adolf-Reichwein-Str. 2,
57068 Siegen, Germany
e-mail: wicht@soziologie.uni-siegen.de

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In this paper, I will show that the operationalization of regional contexts in quantitative empirical analyses often falls short of the theoretical conceptualization of these contexts *as* social environments or contexts of action. This becomes particularly clear in light of the fact that administrative areal units and, hence, administrative boundaries, often form the basis for the operationalization of regional contexts. By contrast, I shall draw on a concept of space which is rooted in geography and is increasingly finding its way into the social sciences (e.g. Goodchild and Janelle 2004; Gulson and Symes 2007). From this perspective, the specific focus of this paper will be on *spatial relations* of social phenomena.

In the following section, I look at the conceptual differences between “place” and “space,” and at how these concepts relate to an understanding of regional contexts. In Sect. 2, I discuss the consequences of neglecting spatial interdependencies and then demonstrate the extent of spatial interrelations on the basis of explorative statistical procedures, using the example of youth unemployment on the district level (*Landkreise*). Although I am focusing on regional contexts here, my paper is equally relevant to research in the field of local contexts, such as neighborhoods.

On Places and Spaces

The concepts of *place* and *space* have a long, contested history (see e.g. Agnew 2011 for a discussion of “place” and “space” or “absolute” and “relational space”). Rather than entering into this debate here, I would like to focus on a concept of place and space (Logan 2012; Massey 2005) which I consider valuable for conceptualizing regional contexts on both a theoretical and quantitative empirical level.

Places have names and boundaries and thus are treated as seemingly given objects to which we can unambiguously refer; we can plot them on a map and label and compare their local properties. In this sense, administrative districts, counties, cities, and other territorial units can be considered places. We could, for example, ask whether one or the other of these districts on average exhibits higher or lower unemployment or higher or lower tertiarization. However, the pure local properties and heterogeneity of places as such are of little relevance for education and labor market sociology (see Heineck et al. 2011, among others, for aggregate data analyses). Places with their properties are actually more interesting as regional or local contextual conditions of social action, i.e., as *opportunity structures* (Furlong et al. 1996; Wicht 2011) or as *socio-cultural environments* (Garner and Raudenbush 1991; Helbig 2010) which structure social action (see also Nonnenmacher in this volume). Such analyses of “place effects” require individual data that are merged with regional data from relevant aggregate levels (for example, administrative districts) using corresponding identification variables.

Such context analyses tend to be based on *hierarchical models* (Goldstein 2011; Snijders and Bosker 1999), which are mainly used in quantitative empirical research on schools (Raudenbush and Willms 1991) and with which the multi-level

structure of data (e.g., students within schools and/or regions) is explicitly accounted for statistically. The objective is to estimate undistorted and reliable contextual effects by considering the statistical dependency of observations *within* regional contexts. The statistical dependencies of observations from *different* contexts, however, are ruled out by the assumptions underlying this model. From this perspective, observations within one and the same regional context are considered to be more similar than observations from different contexts. This similarity can be attributed to statistical dependencies, resulting from observations within a regional context being exposed to the same contextual properties, which in turn differ from context to context. From this perspective, regional contexts are seen as isolated and independent regional units or places in the manner stated above.

The question arises, however, whether the concept of regional contexts as independent places with defined boundaries does justice to considerations of *why* such contexts have an influence on individual behavior (there is a growing interest in this question as it bears on local contextual influences in the research of neighborhood effects, cf. Morenoff 2003; Sampson et al. 1999). Theories of *social relations* play a key role here. But social relations *do not* simply stop at the boundaries of places. In research pertaining to neighborhood effects we can allude to, for example, theories of social capital, and in research about the effects of regional training markets to theories referring to relevant players on the training market. "Effects of places" can thus be intensified or alleviated due to the influence of other places (see Anselin 2003 for *spillover effects* and *spatial externalities*). Following Logan's statement (2012, p. 509): "Routinely, social scientists deal with unmarked boundaries," I want to go beyond an understanding of regional (and local) contexts as places and argue instead that further-reaching social contexts should be taken into account.

Spaces (we can speak of "social spaces" in the context of the social sciences)[1] are more amorphous entities than are places; they are characterized by *blurred boundaries* and *relative localizations* of social phenomena. "Space" refers not so much to where a phenomenon is localized in absolute terms as it does to where a phenomenon is localized relative to other phenomena: "Spatial thinking is about where things are or where they happen, and it is especially about where they are in relation to others" (Logan 2012, p. 508). If the emphasis is on relative localizations, as in *spatial analysis* (Anselin et al. 2004; Ward and Gleditsch 2008), then spatial dependencies *between* places and between observations from *different* places enter the picture. These spatial dependencies arise from social interrelations and exchange and are not given sufficient consideration in the previously mentioned regional context analyses. The existence of these (further-reaching) spatial interdependencies violates an important model assumption of the conventional multi-level analysis, namely that of the statistical independence of regional contexts

[1]In sociology, the term "social space" is—following Bourdieu (1999)—also used as a socio-structural metaphor. This is not how I am using it here.

modeled in accordance with the concept of place. This means that contextual influences on individual behavior cannot be reliably estimated.

The tension between the operationalization of regional contexts and their theoretical conceptualization becomes all the clearer if we consider that the regional (and also local) units which are taken as a basis for socio-scientific contextual analyses are rarely empirically defined regions (cf. Dietz 2002; Kropp and Schwengler 2011, 2012 among others). Rather, as noted above, they are usually merely of an administrative nature and thus often created artificially (e.g., states, administrative districts, local government authorities, and electoral districts). We cannot assume that these entities are congruent with spaces of relevant social interrelation and exchange.

In the following, I discuss the development of spatial interdependencies in general and then evaluate the related statistical problem of spatial correlation using data about youth unemployment on an administrative district level as an example.

Spatial Patterns and Spatial Interdependencies

Spatial dependencies arise when an observation somewhere on the "map" is dependent on one or several other observations on the "map."[2] Spatial dependencies result in non-random spatial patterns in general and spatial clustering in particular (Waller and Gotway 2004). In statistical analyses, they lead to the problem of *spatial autocorrelation*, the extent of which can be evaluated by specific *global* and *local* statistical measures. While local indices of spatial autocorrelation provide measures of similarity between each region and its spatially related regions, global indices subsume all these measures of similarity in a single value by measuring the overall degree of similarity between spatially related regions. In the recent literature, the *Moran's I* statistic is the most prominent measure for both global and local indices (Anselin 1995; Ward and Gleditsch 2008). Measuring the degree of spatial autocorrelation requires the definition of an N × N *spatial weights matrix,* which defines the pairwise connectivity between N regional units. Since the spatial weights matrix has to be defined a priori, it is a sensitive component of spatial analyses, and requires that careful thought be given to the underlying mechanism of spatial dependencies.

Tobler (1970, p. 236) attributes spatial interdependencies to geographical distances, which can be expressed in terms of spatial neighborhoods, in meters, kilometers, miles, or other units: "[…] I invoke the first law of geography: everything is related to everything else, but near things are more related than distant things." It can be hypothesized that social interrelations and exchange between regional units that are spatially close to each other are more probable than between

[2]As researchers for data protection reasons is rarely provided with geo referenced personal data, social scientists generally have to limit their spatial analyses to a particular level of aggregation.

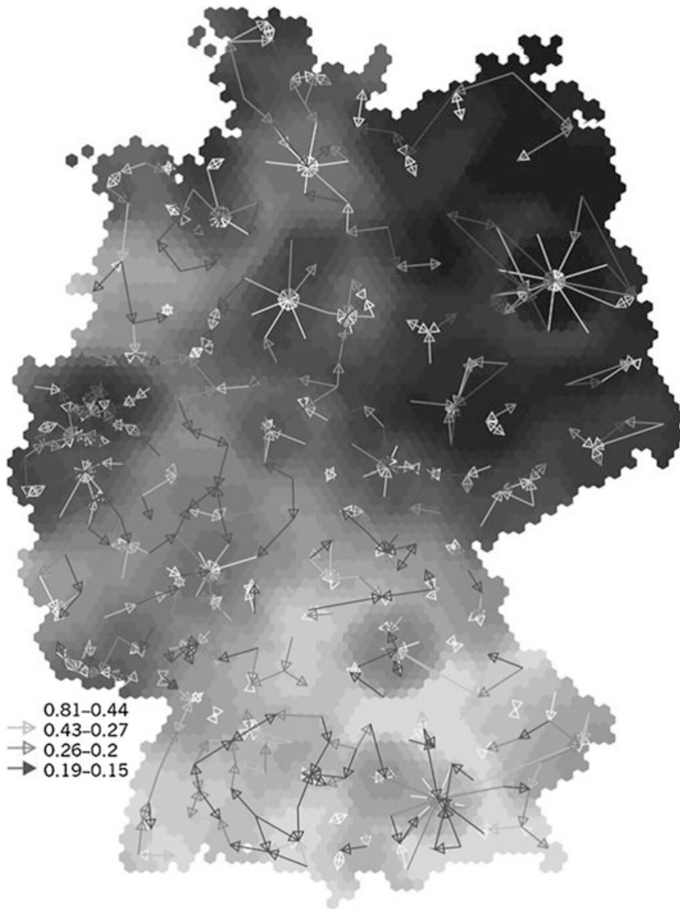

Fig. 1 Kernel density estimation of youth unemployment rates (2011) and main commuting flows of apprentices (2009–2011) in Germany (*Source* Own calculation)

those that are further apart (Anselin 2005). This raises the question, however, of the meaning of "near" and "far." Geographers generally understand distance in Euclidean terms, whereby the connectivities of the N regional units to each other are shown through their *inverse distances* (Ward and Gleditsch 2008). However, this concept falls short, at least as regards the social sciences. Spatial dependencies also hinge to a considerable degree on infrastructure, insofar as it arises through social interrelations and exchange.

The importance of infrastructure can be illustrated by data on youth unemployment in Germany (as a proxy for the share of youths without a training position) at the district level. Figure 1 shows the density of youth unemployment rates from the year 2011 (computed via kernel density estimation, cf. Waller and Gotway 2004), as well as the main commuting flows of apprentices between home and

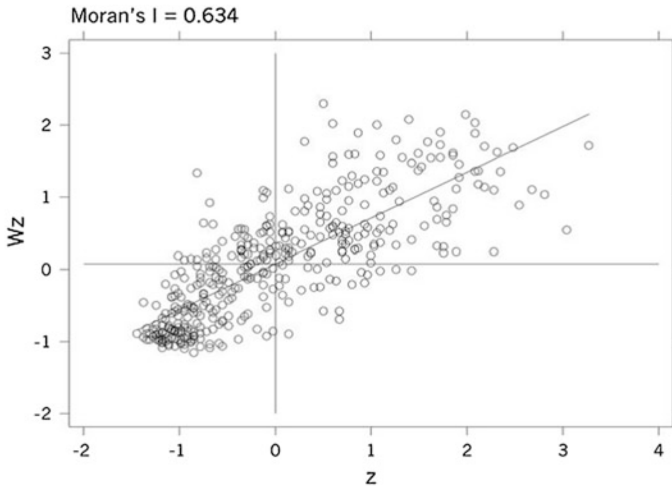

Fig. 2 Moran scatterplot of youth unemployment (administrative district, 2011); based on data about commuting flows of apprentices (2009–2011) (*Source* Own calculation)

workplace (2009–2011).[3] Areas with darker grey values indicate higher youth unemployment and vice versa, whereas arrows with lighter grey values refer to stronger commuting flows and, therefore, to a greater importance of the destination region as a training location for non-local youths, and vice versa.

Figure 1 demonstrates a considerable degree of spatial clustering of youth unemployment, with cities such as Dortmund, Halle, Leipzig, etc. appearing as *hot spots* of youth unemployment. These urban centers draw a large number of youths from surrounding locations and thus seem to concentrate training positions for non-local apprentices. This makes it obvious that the relevant populations for calculating youth unemployment rates at the district level are not independent of each other. Furthermore, the lengths of the arrows indicate that observed commuting flows do not entirely correspond to pure geographical (Euclidean) distances.[4] Rather, infrastructure appears to be of substantial importance for understanding spatial dependencies—in our case, infrastructure in the form of the density of training positions that are unequally distributed across the landscape, with a high concentration of positions in urban centers. Such centers are more attractive to apprentices than other areas that are equally distant or even closer (for *functional regions* in general and *labor market regions* in particular, cf. Kropp and Schwengler 2012, among others).

[3]The commuting matrix is standardized, i.e., it specifies the percentage of commuters from region *i* into region *j* in relation to all commuters from region *i*. Thanks to Per Kropp from the *Institut für Arbeitsmarkt- und Berufsforschung* (IAB) at Nuremberg for providing these data.

[4]The arrows connect the geographical centroids of the relevant administrative districts.

Given the above considerations and the outcome of the explorative analysis, we can now estimate the degree of spatial autocorrelation using Moran's I. The commuting flows between regions again provide the basis for the *spatial weights matrix*. The global Moran's I gives a value of about 0.6.[5] This refers to a general tendency of spatial concentration of higher or lower youth unemployment—as was to be expected on the basis of the *hot spots* in Fig. 1. The scatter plot in Fig. 2 shows the local measure of Moran's I.

Each value of y (z), i.e., the youth unemployment rates of districts i, is plotted against its *spatial lag* (Wz), i.e., the respective average value of the weighted youth unemployment rates in districts j. The weights result from the respective proportions of commuters from district i into administrative district j.[6] While the scatter plot provides detailed information about the correlations in the data, the slope of the regression line represents the global Moran's I, i.e., the average spatial correlation of the data. It becomes clear that districts that are connected by commuting tend to have similar youth unemployment rates because of the exchange that takes place between them. For this reason, these districts should not be regarded as independent areal units. In comparison, a calculation of global Moran's I based on a spatial weights matrix of inverse Euclidean distances gives only about 0.2 (instead of 0.6). This considerable discrepancy between the estimated values shows that a simple distance-based matrix does not capture all the spatial dependencies in the data.

Outlook

In this paper, I used the example of youth unemployment data on an administrative district level to show that the degree of spatial interdependencies between underlying regional units is significant. I also demonstrated that spatial interdependencies resulting from social interrelation and exchange cannot be adequately depicted using inverse Euclidean distances. The results of the explorative analyses confirm my initial suggestion that there is a tension between the theoretical claim about the conceptualization of regional contexts on one hand and their operationalization on the other. This finding is all the more important when we are confronted with the problem of distorted estimations in regional context analyses of contexts which are statistically interrelated.

The findings of this chapter indicate that we need to find a new approach to the problem of spatial interdependencies in context analyses. There are countless ecological studies involving spatial analyses in which explicit spatial dependencies of relevant characteristics on the aggregate level were accounted for by using a *spatial lag* or *spatial error model* (Anselin 2005; Ward and Gleditsch 2008).

[5]Moran's I allows for values between −1 (perfect negative autocorrelation) and 1 (perfect positive autocorrelation).

[6]Both variables are standardized.

However, this was done without checking for characteristics on the individual level (see also the concept of *structural instability*, Anselin 1988). On the other hand, there have been virtually no attempts to model spatial dependencies on the individual level beyond the conventional regional context analysis. Recently, increasingly "spatially integrative" approaches have been making both the degree of correlation within places and the scope of correlation between places the subject of their analyses. In *hierarchical geostatistical models* (Chaix et al. 2005), the variance on the context level is divided into a *spatially structured* and a *spatially unstructured* part (see also the *spatial multiple membership model* or the *conditional autoregressive model*, Browne 2012). In a different modeling strategy, Morenoff (2003) and others (including Sampson et al. 1999) follow a two-stage procedure, in which regional context effects on individual behavior are estimated in a first step using a conventional multi-level model; in a second step, the *spatial dynamics* of the *outcome* variables are analyzed in a *spatial lag model* on the aggregate level. With such methodological developments, the quantitative analysis of spaces could make valuable contributions to the testing of sophisticated theoretical concepts. However, a systematic, methodical comparison of the models described here—including those that are based on analytically demarcated regional units—has yet to be attempted.

Bibliography

Agnew, J. A. (2011). Space and place. In J. A. Agnew & D. N. Livingstone (Eds.), *Handbook of Geographical Knowledge* (pp. 316–330). London: Sage.

Anselin, L. (1988). *Spatial Econometrics. Methods and Models*. Dordrecht: Kluwer.

Anselin, L. (1995). Local indicators of spatial association—LISA. *Geographical Analysis, 27*(2), 93–115.

Anselin, L. (2003). Spatial externalities, spatial multipliers, and spatial econometrics. *International Regional Science Review, 26*(2), 153–166.

Anselin, L. (2005). Spatial econometrics. In T. C. Mills & K. Patterson (Eds.), *Palgrave Handbook of Econometrics* (Vol. 1, pp. 901–941). Basingstoke: Palgrave.

Anselin, L., Florax, R., & Rey, S. J. (Eds.). (2004). *Advances in Spatial Econometrics. Methodology, Tools and Applications*. Berlin und Heidelberg: Springer.

Bourdieu, P. (1999). Site effects. In P. Bourdieu et al. (Eds.), *The Weight of the World. Social Suffering in Contemporary Society,* (pp. 123–129). Stanford, CA: Stanford University Press.

Browne, W. J. (2012). *MCMC Estimation in MLwiN, Version 2.26.* Bristol: University of Bristol.

Chaix, B., Merlo, J., Subramanian, S. V., Lynch, J., & Chauvin, P. (2005). Comparison of a spatial perspective with the multilevel analytical approach in neighborhood studies. The case of mental and behavioral disorders due to psychoactive substance use in Malmo, Sweden, 2001. *American Journal of Epidemiology, 162*(2), 171–182.

Dietz, R. D. (2002). The estimation of neighborhood effects in the social sciences. *An Interdisciplinary Approach. Social Science Research, 31*(4), 539–575.

Furlong, A., Biggart, A., & Cartmel, F. (1996). Neighbourhoods, opportunity structures and occupational aspirations. *Sociology, 30*(3), 551–565.

Garner, C. L., & Raudenbush, S. W. (1991). Neighborhood effects on educational attainment. A multilevel analysis. *Sociology of Education, 64*(4), 251–262.

Goldstein, H. G. (2011). *Multilevel Statistical Models*. Chichester: Wiley.

Goodchild, M. F., & Janelle, D. G. (Eds.). (2004). *Spatially Integrated Social Science*. New York: Oxford University Press.

Gulson, K. N., & Symes, C. (Eds.). (2007). *Spatial Theories of Education. Policy and Geography Matters*. New York, London: Routledge.

Heineck, G., Kleinert, C., & Vosseler, A. (2011). Regionale Typisierung: Was Ausbildungsmärkte vergleichbar macht. *IAB-Kurzbericht,* 13. Nürnberg: IAB.

Helbig, M. (2010). Neighborhood does matter! Soziostrukturelle Nachbarschaftscharakteristika und Bildungserfolg. *Kölner Zeitschrift für Soziologie und Sozialpsychologie, 62*(4), 655–679.

Kropp, P., & Schwengler, B. (2011). Abgrenzung von Arbeitsmarktregionen—ein Methodenvorschlag. *Raumforschung und Raumordnung, 69*(1), 45–62.

Kropp, P., & Schwengler, B. (2012). Vergleich von funktionalen Arbeitsmarktabgrenzungen in Deutschland. *Sozialer Fortschritt, 61*(1), 11–20.

Logan, J. R. (2012). Making a place for space. Spatial thinking in social science. *Annual Review of Sociology, 38*, 507–524.

Massey, D. (2005). *For Space*. London: Sage.

Morenoff, J. D. (2003). Neighborhood mechanisms and the spatial dynamics of birth weight. *American Journal of Sociology, 108*(5), 976–1017.

Raudenbush, S. W., & Willms, J. D. (Eds.). (1991). *Schools, Classrooms, and Pupils. International Studies of Schooling from a Multilevel Perspective.* San Diego: Academic Press.

Sampson, R. J., Morenoff, J. D., & Earls, F. (1999). Beyond social capital. Spatial dynamics of collective efficacy for children. *American Sociological Review, 64*(5), 633–660.

Snijders, T., & Bosker, R. (1999). *Multilevel Analysis. An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage.

Tobler, W. R. (1970). A computer movie simulating urban growth in the Detroit region. *Economic Geography, 46*, 234–240.

Waller, L. A., & Gotway, C. A. (2004). *Applied Spatial Statistics for Public Health Data*. Hoboken, NJ: Wiley.

Ward, M. D., & Gleditsch, K. S. (2008). *Spatial Regression Models. Series: Quantitative Applications in the Social Science.* Thousand Oaks, CA: Sage.

Wicht, A. (2011). *Zwischen Ausbildung und Arbeitsmarkt. Regionale Unterschiede beim Übergang von der beruflichen Erstausbildung in Beschäftigung*. Siegen: Universität Siegen.

Sociological Research on Schools with Relation to Space

Nils Berkemeyer, Björn Hermstein and Veronika Manitius

Abstract In most cases regional disparities of offered school infrastructure, participation in education and acquisition of competencies are investigated in context of specific structural conditions. Based on a brief overview of approaches and findings the paper will consider some needs of development concerning the scientific understanding of the terms space and region. The aim is to point out perspectives for a justice-orientated school research following the approaches of spatial theory and social ecology which takes into account the social embeddedness of school systems.

Keywords Space · Region · Educational inequality · Educational sociology · Regional disparities · School research

Spatial Education Research—Approaches, Insights, and Findings

The following describes the extent to which spatial categories are currently used within empirical education research (in german speaking regions) and the research results which have been put forward with respect to this approach (see Wicht in this volume).

N. Berkemeyer (✉) · BjörnHermstein
Institute of Educational Sciences, Friedrich Schiller University Jena, Am Planetarium 4, 07743 Jena, Germany
e-mail: nils.berkemeyer@uni-jena.de

BjörnHermstein
e-mail: bjoern.hermstein@uni-jena.de

BjörnHermstein
Institute for School Development Research (IFS), TU Dortmund University, Dortmund, Germany

V. Manitius
State Institute for Schools QUA-LiS NRW, Paradieser Weg 64, 59494 Soest, Germany
e-mail: veronika.manitius@qua-lis.nrw.de

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Two approaches can generally be distinguished in this connection. On the one hand, spatial differences within a school system or between school systems are elaborated structurally and descriptively by showing data-based distributions and characteristics as well as the socio-cultural specifics of a residential population. On the other hand, regional structural aspects in terms of context variables are used as predictive factors in interaction with individual aspects, modelled for primary and secondary effects of social origin within the scope of analyses on rational choice concepts with regard to participation in education (Becker and Lauterbach 2010). Spatial analyses about different structural dimensions usually focus on a supply- and/or demand-based aspect of the school system (Weishaupt 2009a). The regionally diverging school infrastructures have proven to be relatively persistent (Ditton 2008) and now, because of an increasing usage of monitoring instruments, such as education reports (regional and otherwise), continually come into play. Furthermore, it was shown that existing disparities with regard to the programmes offered by schools and other institutions have different impacts on different users, which seems to be especially problematic since lower socio-economic groups tend to choose schools closer to home while parents who are involved in their children's education also take schools into consideration that are further away from home (Clausen 2006). Thus, specific structures of school-related education opportunities in a city or region and the respective numbers of schools attended correlate, as Ditton (2007) was able to show with regard to secondary modern schools and attendance numbers at that type of school. There is a structural cause for these spatially disparate educational opportunities as clearly indicated by the match between the percentage of graduates with a higher education entrance certificate and the structures of secondary school choice, proven by sample data collected in Thuringia (Germany) concerning general schools that, according to the education act, offer a higher education entrance certificate[1] (see Fig. 1).

Figure 1 shows the number of classes in schools that offer a higher education entrance certificate within the regional authorities studied. Moreover, the proportions of graduates with a higher education entrance certificate differ between the research units. Also, the individual findings seem to be related. For this reason, a wider choice of schools where students can obtain a higher education entrance certificate is accompanied by higher proportions of graduates with a higher education entrance certificate. This finding does not show causality with regard to the conclusion that a wider choice of schools that offer a higher education entrance certificate causes higher proportions of graduates, particularly when considering the limited significance due to the chosen reference years. The social compositions of the student body, as well as pedagogical processes that cause a production of difference within schools, also have to be taken into account (Rabenstein et al. 2013). Still, considering the determined correlation of 0.75, the result can be

[1]These are comprehensive schools and grammar schools. Comprehensive schools that offer school-leaving entrance certificates for higher education could be built to complement the existing school programmes.

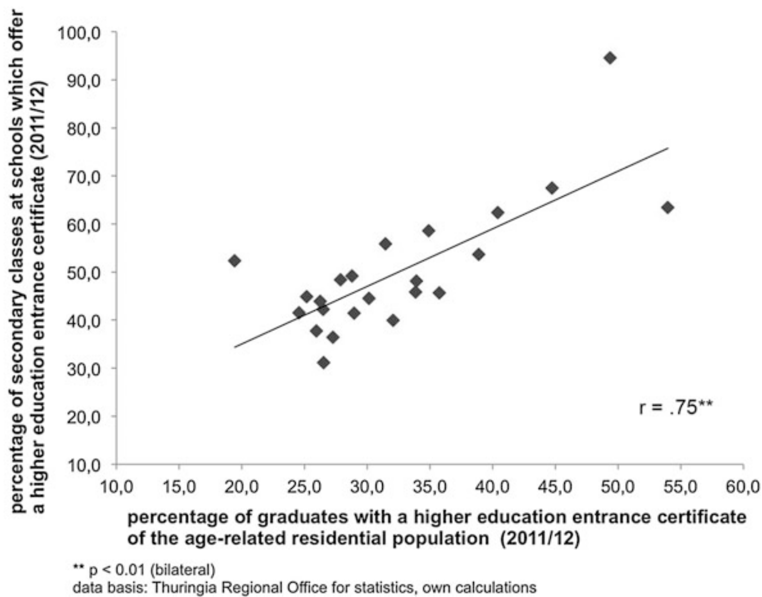

Fig. 1 Matching the percentage of graduates with a higher education entrance certificate with the percentage of secondary classes at schools which offer a higher education entrance certificate in the 23 regional authorities of Thuringia, in the academic year 2011/12 (*Source* own representation)

considered as showing the effects of mediation of the regional structure with regard to the certificate-related chances of success in education. In addition to such analyses, which especially aim to show spatially disparate distributions of school-related infrastructure and success figures, regional structural aspects are also in part considered in studies of acquisition of competence or of behaviour with regard to choosing an educational path.[2] Baumert et al. (2005) showed that about 3 % of the performance variation in mathematics between individual schools can be traced back to regional aspects such as the percentage of residents who are unemployed, on welfare, or hold higher education entrance certificates, but without proposing possible mediation factors (ibid., p. 360). Context factors influence schools' social composition, which is, along with the choice of schools, involved in the development of different learning and developmental environments (Baumert et al. 2006). Sixt (2013) was able to show that the choices of schools as well as the regional degree of interrelation of regions (which indicates the accessibility of school-related infrastructure) influence the likelihood of attending grammar schools. Interaction between regional situations and behaviour when choosing schools was proven earlier by Zymek et al. (2006), which indicates that school opportunities have an orienting function in the socio-regional environment of

[2]Kemper and Weishaupt (2011) and Ditton (2008) show extended findings on that.

participants in education. This short overview concerning selected research projects on space in empirical education research is very revealing. Firstly, it became obvious that the question of a school's geographical location is not negligible. The structural differentiation of schools and the distribution of different types of schools at secondary level are evidently highly important regarding pupils' chances of participation and success in education. In addition to these scientifically and politically valuable insights, a few more characteristics can be identified on which the aforementioned research is based; characteristics which relate to the understanding of space as well as a paradigmatic usage of categories that are rarely reflected upon by the researchers in this field.[3]

First and foremost, the following three characteristics can be mentioned:

1. Concepts of space, such as "region" or "city", are usually used for *situationally important* (Weishaupt 2009b, p. 197) definitions for units of analysis, that is to determine the level of aggregation of statistical data in sociology. They are therefore useful to draw analytical borders without marking relevant structures of order.
2. Assumptions about certain spatial levels, for instance regional authorities or differences between the units studied, are evidenced along with this. However, minor differences can be neglected, assuming that the study uses homogenous units of analysis, which particularly affect local situations of social surroundings and addressable school-related structures of opportunity (Kuper 2009).
3. Space is often understood as a context. Using categories such as "region" or "city" usually aims at determining socio-structural figures on a higher level of aggregation, which are then examined with regard to their statistical relationships with individual choices of education (cf. Ditton 2013).

While such an understanding of space is acceptable in particular cases and expedient when it comes to the empirical questions raised, it still has to be assumed that due to the absence of any systematically organised theoretical reflection on the mentioned terms and social aspects, much enlightening analytical potential with regard to the question of spatial inequalities in the school system remains unrecognised. Some theoretical contemplation on these briefly outlined criteria is set out below (cf. Berkemeyer et al. 2014). Attention should be paid to the fact that the concepts selected here have already found their place in the discourse of educational research.

The content-based accentuations aimed at an ecological- and spatial-theoretical understanding of school systems are rather new about the undertaken contemplation (ibid.).

[3]Initial attempts at a theoretically reflected discussion of space as an issue of analysis are still an exception (e.g. Kemper and Weishaupt 2011; Sixt 2010).

Conceptual Foundations: Spatial Theory and Understanding Context

The following reflections regarding the premise that the analysis of spatial disparities should be based on an understanding of system that is founded on Fend's (2006) concept of an *institutional protagonist* which emphasises the rule-guided and action-mediating formation of school systems.

Due to their elaborated theoretical-conceptual approaches, social geography (Werlen 2008) and works on spatial sociology (Schroer 2006) appear to be relevant disciplines for examining the spatial-differential positioning of school systems. They can be used to make sociologically substantiated and grounded conceptualisations. These conceptualisations do not see spatial structures as passive subject-matter, but as results of human action which illustrate the mechanisms that form structures and perspectives thereof. Furthermore, those research perspectives are explicitly focused on the interaction between the region and society, which, from an educational perspective, suggests a stronger consideration of sociological approaches as well as changes to social structures in order to grasp structural interdependence in analytical models. Löw (2012) suggested a spatial-theoretical conceptualisation. Having discussed classic sociological constructions of terms (Lefèbvre 1993; Bourdieu 1991) and following Giddens' (1988) theory of structuration in terms of social theory, she suggests understanding space as a "relational arrangement of social goods and humans (sentient beings) at places" (Löw 2012, p. 224). According to this concept, social arrangements are actively produced by two fundamental processes that can only be separated analytically: *spacing* (e.g. building schools or allocating students) and *synthesis* (connecting social elements about perception, ideas, and memories), and by that they become relevant in practice as independent structures. Thus, understanding school systems as (re-) produced arrangements enhances the sensitivity for institutionally organised mechanisms for producing differences in local school systems.[4] Because this spatial theory concept paradigmatically belongs to the traditions of relational sociology, which particularly focuses on network-like relationship patterns as well as on a meaningful cultural embedding of relations (Mützel and Fuhse 2010), it proves compatible for systemically oriented schools research. Therefore, it is possible empirically to examine differential constellations of participation and their selective impact by studying the geographical circumstances of school opportunities and individual options of interrelation,[5] i.e. collective patterns of interrelation (cf. Radtke and Stošić 2009). At the same time it is important to stress the significance of institutional arrangements for culturally and habitually conveyed structures of preference that exist at specific places in different ways. Therefore, the respective arrangements of school systems at different places also has to be understood as an

[4]In terms of organised *institutional discrimination* (Gomolla and Radtke 2009).

[5]Löw (2012, p. 214) distinguishes the dimensions of wealth, knowledge, rank and association. Chances of participating in constructing space can be examined using these terms.

expression of specific cultural identities (Assmann 1988) that establish structures of acceptance and preference within social configurations (Elias 1997) and are realized as regionally specific opportunities as well as the demand of school opportunities.

The aforementioned aspects of geographical system arrangements and cultural identity show the need for a more systematic, context-oriented school system research that does not simply see social context as material, institutional and cultural environments (as in Becker and Schulze 2013), but shows an understanding of social context at the same time. A hierarchical distinction of micro-, meso-, macro- and exosystems was submitted by Bronfenbrenner (1993) within his social-ecological concept of human development. This sophisticated understanding of context shows complex initial conditions and interactions, which have to be located and differentiated for regional school systems. When the school is seen as a multi-level system (with a large number of agents and networks that are connected to significant contexts) it is clear that a school offers a wide range of educational opportunities and there is a need for recontextualisation. In line with this view, they are at least in part involved in what constitutes arrangements of school systems and its effects. For an empirical implementation of such an understanding it is necessary to find a basis for understanding different social-ecological contextualisations of regional school systems.

Perspectives of Sociological Research on Schools with Relation to Space

The contemplations above are to be understood as initial attempts to find compatible and analytically substantial concepts describing school systems that promise a broader understanding of spatial differences. Next to conceptual clarifications, three research perspectives can be constituted for the current discussion of spatially-oriented sociological school research.

1. Exploring empirical referential connections of socio-ecological positioning, spatial arrangements and equal opportunities with regard to previous insights of regional governance research as well as the systemic impact of social change.
2. The development of statistical values which describe, at the level of administratively tailored units, characteristics of spatial arrangements (distribution measures, degrees of segregation, circumstances of school locations, and residential areas characterized by different milieus). Alternative analysis units are also conceivable that focus on specific flows of students (Leist and Pietsch 2013) rather than on administrative restrictions.
3. The regional analysis of different forms of governance and their interaction with spatial-cultural conditions of structure with regard to their effects on inequality.

It also seems to be interesting to pursue the question of whether the influences of school system arrangements can be modified with regard to primary and secondary

effects of origin.[6] Considering the aforementioned contemplations, an assessment also needs to be made of whether normative evaluation frameworks for analysing fairness have to be adjusted to include spatial sensitivity and local justice (Schmidt 1992).

It is therefore conceivable that regional school systems underperform in comparison to other regional systems, but, because of their location and the cultural and socio-structural integration involved, tailored to the students' expectations and requirements, at the same time offer opportunities to participate in society. This question also needs to be discussed.

Bibliography

Assmann, J. (1988). Kollektives Gedächtnis und kulturelle Identität. In J. Assmann & T. Hölscher (Eds.), *Kultur und Gedächtnis* (pp. 9–19). Frankfurt a. M.: Suhrkamp.

Baumert, J., Carstensen, C. H., & Siegele, T. (2005). Wirtschaftliche, soziale und kulturelle Lebensverhältnisse und regionale Disparitäten des Kompetenzerwerbs. In M. Prenzel (Ed.), *PISA 2003. Der zweite Vergleich der Länder in Deutschland – Was wissen und können Jugendliche?* (pp. 323–365). Münster: Waxmann.

Baumert, J., Stanat, P., & Watermann, R. (2006). Schulstruktur und die Entstehung differenzieller Lern- und Entwicklungsmilieus. In J. Baumert, P. Stanat & R. Watermann (eds.), *Herkunftsbedingte Disparitäten im Bildungswesen. Vertiefende Analysen im Rahmen von PISA 2000* (pp. 95–188). Wiesbaden: VS.

Becker, R., & Lauterbach, W. (2010). Bildung als Privileg – Ursachen, Mechanismen, Prozesse und Wirkungen. In R. Becker & W. Lauterbach (Eds.), *Bildung als Privileg. Erklärungen und Befunde zu den Ursachen der Bildungsungleichheit* (4th, updated ed.). (pp. 11–49). Wiesbaden: VS.

Becker, R., & Schulze, A. (2013). Kontextuelle Perspektiven ungleicher Bildungschancen – eine Einführung. In R. Becker & A. Schulze (eds.), *Bildungskontexte. Strukturelle Voraussetzungen und Ursachen ungleicher Bildungschancen* (pp. 1–30). Wiesbaden: VS.

Berkemeyer, N., Bos, W., Manitius, V., Bonitz, M., Hermstein, B., & Kämmer, I. (2014). *Chancenspiegel 2014. Regionale Disparitäten in der Chancengerechtigkeit der deutschen Schulsysteme.*. Gütersloh: Bertelsmann.

Bourdieu, P. (1991). *Sozialer Raum und* "*Klassen*". Leçon sur la leçon. 2 Vorlesungen. Frankfurt a. M.: Suhrkamp.

Bronfenbrenner, U. (1993). *Die Ökologie der menschlichen Entwicklung. Natürliche und geplante Experimente*. Frankfurt a. M.: Fischer.

Clausen, M. (2006). Warum wählen Sie genau diese Schule? Eine inhaltsanalytische Untersuchung der Begründung der Wahl der Einzelschule innerhalb eines Bildungsgangs. *Zeitschrift für Pädagogik, 52*, 69–90.

Ditton, H. (2007). Schulwahlentscheidungen unter sozial-regionalen Bedingungen. In O. Böhm-Kasper, C. Schuchart, & U. Schulzeck (Eds.), *Kontexte von Bildung* (pp. 21–38). Münster: Waxmann.

Ditton, H. (2008). Schule und sozial-regionale Ungleichheit. In W. Helsper & J. Böhme (Eds.), *Handbuch der Schulforschung* (2nd, revised and expanded ed.). (pp. 631–649). Wiesbaden: VS.

[6]Maaz and Nagy (2009) offer a profound discussion on identifying primary and secondary effects of origin that could be complemented by the aforementioned aspects.

Ditton, H. (2013). Kontexteffekte und Bildungsungleichheit: Mechanismen und Erklärungsmuster. In R. Becker & A. Schulze (Eds.), *Bildungskontexte. Strukturelle Voraussetzungen und Ursachen ungleicher Bildungschancen* (pp. 173–206). Wiesbaden: VS.

Elias, N. (1997). *Über den Prozeß der Zivilisation. Soziogenetische und psychogenetische Untersuchungen*. Vol. 1. Frankfurt a. M.: Suhrkamp.

Fend, H. (2006). *Neue Theorie der Schule. Einführung in das Verstehen von Bildungssystemen* (2nd revised ed.). Wiesbaden: VS.

Giddens, A. (1988). *Die Konstitution der Gesellschaft. Grundzüge einer Theorie der Strukturierung*. Frankfurt a. M: Campus.

Gomolla, M., & Radtke, F.-O. (2009). *Institutionelle Diskriminierung. Die Herstellung ethnischer Differenz in der Schule* (3rd ed.). Wiesbaden: VS.

Kemper, T., & Weishaupt, H. (2011). Region und soziale Ungleichheit. In H. Reinders, H. Ditton, C. Gräsel & B. Gniewosz (Eds.), *Empirische Bildungsforschung. Gegenstandsbereich* (pp. 209–219). Wiesbaden: VS.

Kuper, H. (2009). Kommentar zur Bedeutung der Kategorie *Region* im Rahmen der Bildungsberichterstattung. In R. Tippelt (Ed.), *Steuerung durch Indikatoren. Methodologische und theoretische Reflektionen zur deutschen und internationalen Bildungsberichterstattung* (pp. 201–205). Opladen: Barbara Budrich.

Lefèbvre, H. (1993). *The production of space*. Oxford: Blackwell.

Löw, M. (2012). *Raumsoziologie* (7th ed.). Frankfurt a. M: Suhrkamp.

Leist, S., & Pietsch, M. (2013). *Regionale Gliederung von Schullandschaften mittels stochastischer Netzwerkverfahren*. A contribution to the conference “Forschungsdesiderate im Feld von Bildung und Region” at the National Educational Panel Study (NEPS), Otto-Friedrich-Universität Bamberg. 15 Nov 2013.

Maaz, K., & Nagy, G. (2009). Der Übergang von der Grundschule in die weiterführenden Schulen des Sekundarschulsystems: Definition, Spezifikation und Quantifizierung primärer und sekundärer Herkunftseffekte. In J. Baumert, K. Maaz & U. Trautwein (Eds.), *Bildungsentscheidungen. Sonderheft 12 der Zeitschrift für Erziehungswissenschaft* (pp. 153–182). Wiesbaden: VS.

Mützel, S., & Fuhse, J. (2010). Einleitung: Zur relationalen Soziologie. Grundgedanken, Entwicklungslinien und transatlantische Brückenschläge. In J. Fuhse & S. Mützel (Eds.), *Relationale Soziologie. Zur kulturellen Wende der Netzwerkforschung* (pp. 7–35). Wiesbaden: VS.

Rabenstein, K., Reh, S., Ricken, N., & Idel, T.-S. (2013). Ethnographie pädagogischer Differenzordnungen. Methodologische Probleme einer ethnographischen Erforschung der sozial selektiven Herstellung von Schulerfolg im Unterricht. *Zeitschrift für Pädagogik, 59*, 668–690.

Radtke, F.-O., & Stošić, P. (2009). Lokale Bildungsräume. Ansatzpunkte für eine integrative Schulentwicklung. *Geographische Revue, 11*, 34–51.

Schmidt, V. H. (1992). Lokale Gerechtigkeit. Perspektiven soziologischer Gerechtigkeitsanalyse. *Zeitschrift für Soziologie, 21*, 3–15.

Schroer, M. (2006). *Räume, Orte, Grenzen. Auf dem Weg zu einer Soziologie des Raums*. Frankfurt a. M.: Suhrkamp.

Sixt, M. (2010). *Regionale Strukturen als herkunftsspezifische Determinanten von Bildungsentscheidungen.* Dissertation. https://kobra.bibliothek.uni-kassel.de/handl/urn:nbn:de:hebis:34-2010110934909. Accessed 09 Dec 2013.

Sixt, M. (2013). Wohnort, Region und Bildungserfolg. Die strukturelle Dimension bei der Erklärung von regionaler Bildungsungleichheit. In R. Becker & A. Schulze (Eds.), *Bildungskontexte. Strukturelle Voraussetzungen und Ursachen ungleicher Bildungschancen* (pp. 457–481). Wiesbaden: VS.

Weishaupt, H. (2009a). Bildung und Region. In R. Tippelt & B. Schmidt (eds.), *Handbuch Bildungsforschung* (2nd, updated and expanded ed.). (pp. 217–231). Wiesbaden: VS.

Weishaupt, H. (2009b). Indikatoren für die regionale Bildungsberichterstattung. In R. Tippelt (ed.), *Steuerung durch Indikatoren. Methodologische und theoretische Reflektionen zur*

deutschen und internationalen Bildungsberichterstattung (pp. 189–200). Opladen: Barbara Budrich.

Werlen, B. (2008). *Sozialgeographie. Eine Einführung* (3rd ed.). Bern: Haupt.

Zymek, B., Sikorski, S., Franke, T., Ragutt, F., & Jakubik, A. (2006). Die Transformation regionaler Bildungslandschaften. Vergleichende Analyse lokaler und regionaler Schulangebotsstrukturen in den Städten Münster, Recklinghausen, Bochum und dem Kreis Steinfurt 1995–2003. In W. Bos, H. G. Holtappels, H. Pfeiffer, H.-G. Rolff & R. Schulz-Zander (Eds.), *Jahrbuch der Schulentwicklung Volume 14. Daten, Beispiele und Perspektiven* (pp. 195–219). Weinheim, Munich: Juventa.

Data-Driven Planning and Regional Educational Management

Axel Gehrmann, Sascha Pelzmann and Dominique Matthes

Abstract Education reports now represent a core element of data-driven educational planning processes and serve as the basis for educational management at local and regional level. The present paper seeks to reconstruct, categorise and evaluate the structure of data-driven planning, provide some theoretical reflections thereon, and suggest perspectives for future development in the context of the recent discourse on steering focusing on 'educational governance'. The production of education reports in the German states of Baden-Württemberg and Saxony provides case studies of the challenges and opportunities that can be expected with data-driven planning. That data do not always lead straightaway to action, and that different actors on different (horizontal and vertical) levels of the system prefer to tussle over the interpretive high ground, is perhaps unsurprising from either a scientific or a steering-theoretical perspective; in practice, however, this can lead to potential problems and conflicts.

Keywords Education reports · Educational monitoring · Data-driven planning · Regional educational management · Educational governance · New steering forms in education

A. Gehrmann (✉)
Centre for Research in Teacher Training, Vocational Training and School Education
(Zentrum für Lehrerbildung, Schul- und Berufsbildungsforschung—ZLSB),
Technical University Dresden, Weberplatz 5, 01217 Dresden, Germany
e-mail: axel.gehrmann@tu-dresden.de

S. Pelzmann · D. Matthes
Institute of Education, General Didactics and Instructional Research,
Technical University Dresden, Weberplatz 5,
01217 Dresden, Germany
e-mail: sascha.pelzmann@tu-dresden.de

D. Matthes
e-mail: dominique.matthes@tu-dresden.de

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This chapter will describe and attempt to draw conclusions about the structure of current data-driven planning, its development and the extent of its success in regional education networks, as well as the challenges that confront political decision-makers acting within a conglomeration of widely differing local interests, especially in rural areas.[1] This is based on original observations and experience in educational monitoring processes in the German states of Baden-Württemberg and Saxony (Gehrmann et al. 2010, 2011a, b, c; Gehrmann 2012).

For a decade, the field of education policymaking has been crowded with diverse output-oriented interests. This chapter will seek to untangle this state of affairs, focusing on data-driven planning processes. We will examine the necessity of data-driven regional planning in the context described, and question its effectiveness when it is not in tune with the characteristics of local suburban or rural areas and the actors within them. Finally, we will examine which of the developments that have been set in motion in recent years could be emphasised or reinforced. After some *Opening remarks (1)*, *Educational monitoring processes and education reports (2)* and the *Framing (3)* of data-driven planning will be placed in context. Finally, we offer a *Conclusion (4)* evaluating the impact that data-driven planning has had up to now, and outline some *Future perspectives (5)*.

Opening Remarks

The last decade in education policymaking in Germany has been marked by a constant engagement with 'output', that is, measuring the achievements of the education system. In this context, international studies of academic achievement in schools began to question whether the 'input' into the German system, in the form of financial infrastructure, educational institutions and teaching jobs, was really adequate to ensure a high quality of education—something that had long been taken for granted. The studies TIMSS, PISA 2000 and IGLU challenged perceptions by showing that the German educational infrastructure apparently did not guarantee a favourable outcome in international comparisons. In fact, academic achievement in German schools was rated only around the average (for a summary see, for example, Köller 2008). Achievement gaps first became clear in international country comparisons, but were also evident in subsequent comparison studies between the German Federal States (e.g. PISA-E). Furthermore, it became clear that pupils did not have equal chances of success: the socio-economic status of a child's parents was a particularly strong predictor of higher academic achievement (e.g. cf. Baumert et al. 2006; Becker and Lauterbauch 2008).

[1]The basis for this chapter is a lecture by Prof. Axel Gehrmann delivered at the conference "Qualitative Entwicklung der Bildungsregionen—Bildungsmonitoring und datenbasierte Planung" ("Qualitative development of educational regions—educational monitoring and data-driven planning") at the State Institute for School Development in Stuttgart, 24 October 2013.

Not only did Germany come out with merely an average score in comparisons of academic achievement, the OECD also published preliminary research results ('Education at a Glance') that showed too many German pupils were leaving school without a qualification. In addition, the figures for tertiary transitions to university were below the international average; investment had also been stagnating for years (e.g. cf. OECD 2010). The debate over domestic and international rankings, and over the causes and conditions of shortcomings was born, and it still continues today.

It was against this background that the central actors in education policymaking at both state and Federal level (BMBF, Kultusministerien, IQB, etc.) began to launch action programmes after 2000, and cooperation between the different states' Culture Ministers culminated in 2006 in the *Gesamtstrategie zum Bildungsmonitoring* (General Strategy for Educational Monitoring). In this document the Federal Government committed to continue its participation in academic achievement studies, formulate educational standards and carry out cross-state comparison studies. It also established a framework for inter-state collaboration in the production of education reports and the development of educational monitoring at both state and Federal level (cf. KMK 2006). However, this was not only a top-down process—individual cities and communities were also affected by these debates, as at local level parents and employers began to ask how situations of inequality could be addressed and how more young people with qualifications could be integrated into the employment system. This quest for change grew more urgent as the demographic importance of 'leaving no child behind' became increasingly clear. Local or regional reports on education became a central element of data-driven education planning (cf. Gehrmann et al. 2010, 2011a; b, c; Gehrmann 2012).

Educational Monitoring and the Production of Education Reports

Education reports are a crucial element of current educational monitoring. The production of an education report entails the continuous gathering of indicator-based 'public information on the basic conditions, procedural characteristics, results and returns of educational processes' (Döbert and Klieme 2009, p. 317). Data are drawn from official statistics (Federal Statistical Offices, as well as the statistical offices of the German states and other regional data sources); social-scientific data about educational histories on CVs are also included. Broadly speaking, educational monitoring makes 'education in society transparent, and thus provides a foundation for targeted discussion and political decision-making. In the centre of focus […] is the work of educational institutions from nursery school right up to adult further education' (ibid., p. 320; translation by the author).

At Federal level, the production of education reports is now established practice (cf. Konsortium Bildungsberichterstattung 2005, 2006). Several reports have been made available to the public. The practice has gradually become equally established

in the German states, most of which have now published at least two or three editions of their respective education reports since 2007. At state level, reports tend to highlight particular areas, such as migration or cultural education. It is important to note that the reports have not initiated a great deal of debate either in the national or the state context—though their conclusions can no longer be denied. It is important to emphasise this because data have indicated that new rationales for further long-term transformation are urgently needed. Unfortunately, it is no surprise to researchers carrying out empirical studies that their evidence is rarely used to undergird data-driven planning, let alone forward-looking policymaking. This point will be examined in greater detail below.

The education policymaking powers of local authorities at city, district and community level are limited according to the German Constitution—a community might put the building up, but 'the lord of the manor is the State' (Avenarius and Heckel 2000, p. 157). Communities have no power over teaching content and no say in the hiring of teachers, and can therefore be made responsible for output only to a limited extent. Central steering of education policy was once seen as a big step forward to break particular local interests and guarantee the universal right to education—now, however, it is the focus of criticism. In rural areas the State is perceived to be failing to guarantee universal rights such as social equality, and communities are mobilising to demand more participation.

Cities and communities therefore represent both the start- and the end-point of efforts made in education policymaking. The 'Aachen Declaration' by the Association of German Cities emerged out of a move by the principal local-authority associations to place education in the centre of focus (cf. Deutscher Städtetag 2007).

It should be noted that the Federal States have also instigated attempts to gather data on educational development in local areas and to establish regional educational networks (e.g. cf. the 'Impulsprogramm Bildungsregionen'—Impulse Programme for Educational Regions—in Baden-Württemberg) but the extent to which the overall system can be steered from institutional centres remains limited. Differences in local situations mean that possibilities for Federal action are restricted because of (still) inadequate regional know-how, which means that, for example, local situations of inequality are not understood. There is a clear move in education policymaking to acknowledge the control deficit that has existed since the 1980s, and to promote greater delegation of responsibility.

A research done by the "School Space" study group at[2] the Technical University Dresden counted a total of 58 education reports from 38 cities (see Fig. 1) up to October 2013, including short- and long-form reports from all over Germany. Some cities' reports are already in their second edition; others have progressed even further. In addition, 25 regional education networks, mostly within administrative

[2]Project leader: Prof. Axel Gehrmann; researchers: Dominique Matthes, Anne Ohndorf, Sascha Pelzmann.

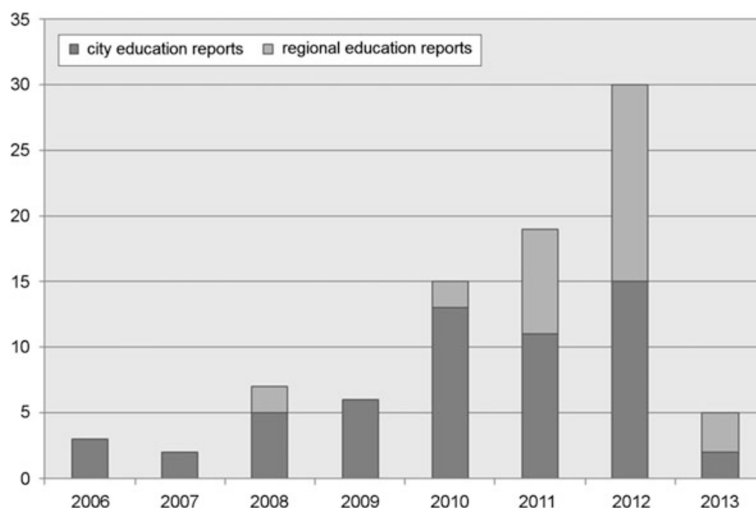

Fig. 1 Comparison of number of city and regional education reports, 2006–October 2013. (*Source* own representation)

districts, have published 30 education reports. Only a quarter of these networks have released more than one report.

Data-driven planning has therefore arrived in local areas, and has been developing since 2007. In cities, education networks have made faster progress with their reports—even by 2010 and 2011, significantly more reports were emerging from cities than rural areas. Rural districts have been catching up, however, especially since 2012. More reports can be expected in the next few years—the Federal programme 'Local Learning' ('Lernen vor Ort') places a commitment on all regions to provide education reports.

The education reports have taken on a certain structure in the course of their development, now tending to contain eight sections, A (framework and basic information) to H (non-formal and informal learning spaces), reconstructing the course of a school career (cf. Statistisches Bundesamt et al. 2010). At first, it was difficult to establish the appropriate scale of transformational goals because action fields were lacking. These are now being made clear, either in the reports themselves or in public debate after publication.

Framing Data-Driven Planning

The number of education reports being produced in rural areas has grown significantly in recent years. Programmes launched by the Federal States to support closer examination of education at local level represent only one side of the story: it is increasingly clear that people in rural towns and districts are now motivated to

engage in an active analysis of past, present and future realities in education. The following ideas are represented.

The new focus on 'quality control' within the education system, which includes the production of education reports, serves two ends within the discourse on equality of opportunity, particularly in rural areas: firstly the re-measuring of 'cultural objectivations' (cf. Fend 1980, pp. 2–18—translation by the author) (i.e., what do we know about the education system?) and secondly the attempt to reconstruct potential individual processes of acquisition through representations of time scales (i.e., who succeeds in doing what?).

From the *theoretical perspective of steering in relation to educational planning*, we can comment as follows: on the one hand we can see there is an attempt to legitimate universal rights (those guaranteed by the State) against particular (regional) interests (cf. Zymek 2001, 2008)—demographic developments alone make it necessary to seek new solutions for specific places and for the distribution of resources. At the same time, however, we see an attempt to define particular (regional) interests as universal ones, because joining the problems in rural areas to those in the cities reveals an inadequacy of resources as the respective parties seek to secure their present education offerings. From the *theoretical perspective of actors*, we can observe that within the field of steering many actors come into play, pursuing extremely diverse interests with different options open to them—including some from a legal perspective.

It is important to acknowledge what Helmut Fend described as the relationship between the 'score' (*Partitur*) and the 'performance' (*Aufführung*) (cf. Fend 2008, p. 15). Fend pointed out the unique structural logic and dynamics that have developed in education systems; he suggested that constitutional reality comprises a combination of legal frameworks, constitutional norms and implementation by educational management (ibid.). It is plain that the regulatory 'score' usually seeks to ensure that local authorities have leeway to work; whether this leeway is then actually used for performing actions is, however, not always certain. Furthermore, macro-political steering interests are often undermined on the micro level of individual institutions because they are imperfectly understood or implemented by educators and teachers. Ultimately, 'translation problems' must always be reckoned with (cf. Altrichter and Maag Merki 2010, p. 15ff.).

Sometimes seeking to overcome these translation problems but often not acknowledging them, existing regional education networks have tended to develop similar organisational structures: they establish '*education offices*' at the centres of local administrations, and moderate their processes through '*steering groups*' involving the central actors in education policymaking, seeking to enable the transfer of these processes to the micro level through *regional conferences* (cf. Gehrmann and Pelzmann 2010).

Such moves towards 'translation' also bring challenges, however, because data need to be explained—in particular, questions about concrete action fields and projects tend to arise very quickly. The process often takes place against a background where there is no legal framework or power of disposition, or no practicable time scale for processes to unfold. A lot of new ground is therefore being trodden,

but real possibilities for change in terms of participation and goal-orientation are already becoming clear.

Conclusion: What Is the Impact of Educational Monitoring?

The *difficulties* of implementing regional educational monitoring at local level can be summarised under the following areas:

- *Personnel*: lack of expertise in data-processing, limited understanding of wider picture, departmental limitations;
- *Technology*: lack of basic data in local authorities, un-unified data processing;
- *Time*: persistent expectation of fast results, delays caused by data validation;
- *Presentation*: local perspective versus understanding of wider picture;
- *Legitimisation*: recommendations should be legally binding;
- *Reception*: local consequences of reports.

On the other hand, up to now we can observe the following positive results:

- *Data foundations*: increase in familiarity of local authorities with data-processing, growth of expertise within departments and beyond;
- *Quasi-longitudinal interpretation*: cross-sectional data show changes in time scales;
- *Regional inclusion*: no spot checks, local populations, local interpretation;
- *Participation*: production of reports according to 'CV concept' creates transparency for decisions;
- *Legitimisation*: public debate on education questions helps improve distribution of resources and data-driven planning.

Future Perspectives

For the future, it is clear that regional education networks can no longer exist effectively without the support of appropriate data-driven planning (*establishing basic data*). The smaller the represented scale of an education network, the more clarity should be brought into the pursuit of particular goals, for example through topic-specific reports (*goal orientation*). The involvement of different actors from civil society is of vital importance, above all in the creation and implementation of active measures, even if this only happens at the discussion stage after reports have been published (*participation*). Education issues need to be included on political, administrative, economic and civil agendas. The success of the decision process is dependent on enabling consensus between the relevant actors; long-term vibrancy

in education networks will require visible and significant results that are experienced by actors in practice (*decisions*).

Nonetheless, it is often debatable whether education reports or educational monitoring processes really are applied as intended, or whether they merely have an 'expressive function' (Drewek 2009, p. 185, translation by the author), at best generating awareness of existing deficits and instigating a search for solutions. It is important to pose this question, especially on the background of the 'historical inertia at the institutional macro level and the strategical flexibility at interactional and actor level' (ibid.). The focus thus shifts to an analytical governance-related perspective, which acknowledges the differing logics of action and patterns of communication between economic, political and education systems, and looks at the reception of evidence-driven steering by the affected actors, with their own rational approaches. Research results in this area are not yet available, but would be very useful for the future.

Bibliography

Altricher, H., & Maag Merki, K. (2010). Steuerung und Entwicklung des Schulwesens. (Steering and Developments in the Nature of the School.) In H. Altricher & K. Maag Merki (Eds.), *Handbuch Neue Steuerung im Schulsystem* (pp. 15–40). Wiesbaden: VS.

Avenarius, H., & Heckel, H. (2000). *Schulrechtskunde. Ein Handbuch für Praxis, Rechtsprechung und Wissenschaft.* (Schools Law. A Handbook for Practice, Adjudication and Academic Study.) Neuwied, Kriftel: Luchterhand.

Baumert, J., Stanat, P., & Watermann, R. (Eds.). (2006). *Herkunftsbedingte Disparitäten im Bildungswesen: Differentielle Bildungsprozesse und Probleme der Verteilungsgerechtigkeit.* (Disparities in Education related to Pupils' Backgrounds: Differential Educational Processes and Problems of Fair Allocation.) Wiesbaden: VS.

Becker, R., & Lauterbach, W. (Eds.). (2008). *Bildung als Privileg. Erklärungen und Befunde zu den Ursachen der Bildungsungleichheit. (Education as Privilege. Explanations and Findings on the Causes of Inequality in Education.)* (3rd ed.). Wiesbaden: VS.

Deutscher Städtetag. (2007). *Aachener Erklärung des Deutschen Städtetages anlässlich des Kongresses „Bildung in der Stadt" am 22./23. November 2007.* (Aachen Declaration of the Association of German Cities on the Occasion of the "Education in the City" Convention, 22–23 November 2007.) http://www.staedtetag.de/imperia/md/content/veranstalt/2007/58.pdf. Accessed 14 Feb 2014.

Döbert, H., & Klieme, E. (2009). Indikatorengestützte Bildungsberichterstattung. (The Production of Education Reports based on Indicators.) In R. Tippelt & B. Schmidt (Eds.), *Handbuch Bildungsforschung* (pp. 317–336). Wiesbaden: VS.

Drewek, P. (2009). Grenzen und Probleme der Steuerung des Bildungssystems. (Limits to and Problems with Steering of the Education System.) In R. Tippelt (Ed.), *Steuerung durch Indikatoren. Methodologische und theoretische Reflexionen zur deutschen und internationalen Bildungsberichterstattung. Vorstandsreihe der Deutschen Gesellschaft für Erziehungswissenschaft DGfE* (pp. 181–187). Opladen, Farmington Hills: Barbara Budrich.

Fend, H. (1980). *Theorie der Schule.* (Theory of School.) Munich, Wien, Baltimore: Urban und Schwarzenberg.

Fend, H. (2008). *Schule gestalten. Systemsteuerung, Schulentwicklung und Unterrichtsqualität.* (Structuring School. Systemic Steering, School Development and Quality of Teaching.) Wiesbaden: VS.

Gehrmann, A. (2012). Regionale Bildungsberichterstattung und ihre Bedeutung für die Lehrerbildung. Ein exemplarisches Beispiel aus der Pädagogischen Hochschule Schwäbisch Gmünd. (Regional Production of Education Reports and their Significance for Teacher Training. A Case Study of the Teacher Training College in Schwäbisch Gmünd.) In C. Cramer, K.-P. Horn & F. Schweitzer (Eds.), *Lehrerausbildung in Baden-Württemberg. Historische Entwicklungslinien und aktuelle Herausforderungen.* (Teacher Training in Baden-Württemberg. Historical Development and Current Challenges.) (pp. 89–113). Nürnberg: IKS Garamond.

Gehrmann, A., Haas, T., Pelzmann, S., & Zimmer, V. (2010). *Bildung in Schwäbisch Gmünd 2010. Erster indikatorengestützter Bericht*. (Education in Schwäbisch Gmünd 2010. First Indicator-Based Report.) Stadt Schwäbisch Gmünd (Ed.). http://www.schwaebisch-gmuend.de/brcms/pdf/Bildungsbericht.pdf. Accessed 14 Feb 2014.

Gehrmann, A., Haas, T., Pelzmann, S., & Zimmer, V. (2011a). *Bildung im Ostalbkreis 2011. Erster indikatorengestützter Bericht.* (Education in Ostalbkreis 2011. First Indicator-Based Report.) Landratsamt Ostalbkreis (ed.). http://www.ostalbkreis.de/sixcms/media.php/26/Bildung_im_Ostalbkreis_2011.pdf. Accessed 14 Feb 2014.

Gehrmann, A., Haas, T., Pelzmann, S., & Zimmer, V. (2011b). *Analyse der Bildungsstruktur im Landkreis Heidenheim – Vorabanalyse*. (Analysis of the Structure of Education in Heidenheim District – First Analysis.) Landratsamt Heidenheim (Ed.). http://www.landkreis-heidenheim.de/bildunggesellschaftundsoziales/bildung/vorabanalysederbildungsstrukturimlandkreis/index.htm. Accessed 14 Feb 2014.

Gehrmann, A., Haas, T., Pelzmann, S., & Zimmer, V. (2011c). Datengewinnung in Bildungsregionen. Ein Interview. (Data Gathering in Educational Regions.) In Landesinstitut für Schulentwicklung Baden-Württemberg (Ed.), *Impulsprogramm Bildungsregionen. Datenbasierte Planung in Bildungsregionen* (pp. 27–32). Stuttgart.

Gehrmann, A., & Pelzmann, S. (2010). Bildungsberichterstattung im kommunalen Raum. Berufsbildung. (Production of Education Reports in Local Areas. Vocational Training.) *Zeitschrift für Praxis und Theorie in Betrieb und Schule 123*, 35–38.

Köller, O. (2008). Bildungsstandards in Deutschland. Implikationen für die Qualitätssicherung und Unterrichtsqualität. (Educational Standards in Germany. Implications for Quality Assurance and Teaching Quality.). *Zeitschrift für Erziehungswissenschaft, 9*, 47–59. Special issue.

Konsortium Bildungsberichterstattung. (Ed.) (2005). *Gesamtkonzeption der Bildungsberichterstattung*. (General Concept of the Production of Education Reports.) http://www.bildungsbericht.de/daten/gesamtkonzeption.pdf. Accessed 14 Feb 2014.

Konsortium Bildungsberichterstattung. (Ed.) (2006). *Bildung in Deutschland. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration*. (Education in Germany. An Indicator-Based Report with an Analysis of Education and Migration.) Bielefeld: Bertelsmann.

KMK – Kultusministerkonferenz (Ed.) (2006). *Gesamtstrategie Bildungsmonitoring*. (General Strategy for Educational Monitoring.) Munich: Luchterhand.

OECD – Organisation for Economic Co-operation and Development. (Ed.). (2010). *Education at a glance 2009. OECD indicators*. Paris: OECD.

Statistisches Bundesamt, Deutsches Institut für Erwachsenenbildung, & Statistisches Landesamt Baden-Württemberg. (Ed.) (2010). *Anwendungsleitfaden zum Aufbau eines kommunalen Bildungsmonitorings*. (Code of Practice for the Building of Local Educational Monitoring.) http://wwwext.stala.bwl.de/BildungKultur/Analysen!Auf-saetze/bildungsmonitoring.pdf. Accessed 14 Feb 2014.

Zymek, B. (2001). Re-Partikularisierung universalistischer Bildungssysteme? Historische Anmerkungen zur "Deregulierung" als bildungspolitischer Reformstrategie. (Reparticularisation of Universal Education Systems? Remarks on "Deregulation" as a Strategy for Reform in Education Policy.) In H. J. Apel (Ed.), *Das öffentliche Bildungswesen. Historische Entwicklung, gesellschaftliche Funktionen, pädagogischer Streit* (pp. 84–102). Bad Heilbrunn: Klinkhardt.

Zymek, B. (2008). Geschichte des Schulwesens und des Lehrerberufs. (History of the School and the Teaching Profession.) In W. Helsper & J. Böhme (Eds.), *Handbuch der Schulforschung* (pp. 203–237). Wiesbaden: VS.

Regionalization as a Justice-Based Support Strategy for School Improvement

Veronika Manitius, Anja Jungermann and Wilfried Bos

Abstract Currently, various measures of regionalization in the educational sector can be observed in Germany. These can be understood as a decentralized and cooperative reform strategy in the post-PISA era, next to the rather centrally organized governance reforms. These measures are attributed with programmatic objectives such as the promotion of educational equity. In the federal state of North Rhine-Westphalia the local education offices are a central actor in these school-system related regionalization processes. The paper theoretically considers possible justice-based support services that regionalization measures can provide for the school system. Empirical evidence of a baseline survey of the local education offices is presented to show the support services of this actor and to relate them to the considerations of justice.

Keywords Local education office · Regionalization · Justice · School development · Support system

In the aftermath of the important large-scale assessment studies (PISA, PIRLS, TIMSS) and their startling findings, different reform measures were undertaken in the educational sector in all German states. Apart from the mainly output-oriented

V. Manitius (✉)
State Institute for Schools QUA-LiS NRW (Germany),
Paradieser Weg 64, 59494 Soest, Germany
e-mail: veronika.manitius@qua-lis.nrw.de

A. Jungermann · W. Bos
Institute for School Development Research (IFS), TU Dortmund University
(Germany), Vogelpothsweg 78, 44227 Dortmund, Germany
e-mail: anja.jungermann@tu-dortmund.de

W. Bos
e-mail: wilfried.bos@tu-dortmund.de

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reform measures such as the definition of standards, school inspection, regular nationwide student assessment, and educational monitoring, other reform efforts can be identified which can be classified as a "development trend for regionalization" (Brüsemeister 2012). These comprise, especially, the governing actors' efforts to implement support systems for educational institutions and stakeholders as well as for school development processes by changing existing structures or implementing new ones on the local level. The discussion on regionalization is particularly relevant in Germany, where educational decision-making power has so far been concentrated on the level of the sixteen federal states (*Länder*), with intermediary levels such as regions and municipalities having no say in educational issues. In the German discourse, the regionalization measures are often linked to the vision of creating "educational landscapes". These rely on the assumption that the central local stakeholders are the crucial "caretakers on the spot", who can answer the local educational actors' specific needs with equally specific local resources and solutions (Manitius 2013; Berkemeyer and Pfeiffer 2006). To coordinate such regionalization measures, in the Western German state of North Rhine Westphalia (NRW) local education offices (*Regionale Bildungsbüros*) operate on the municipal level, which have been installed with joint personnel resources from the state government (that of the *Land*) and the municipality. They are supposed to institutionally embody the much-requested new cooperation between local political entities and the *Land* in matters of school development (e.g. cf. Deutscher Städtetag 2007). In the following, the programmatic goals and theoretic assumptions of the support strategy *regionalization* as well as its possible justice-based support services for the school system will be presented on the basis of empirical evidence from a baseline survey.

Regionalization in Education

The central goals that are pursued with the idea of regionalization can be retrieved from project descriptions or position papers of transregional organization (e.g. Deutscher Städtetag, the Association of German Cities): They mainly articulate goals such as *improving educational equity* or *supporting school development*, even though these goals are often mentioned without further reflection or operationalization (Jungermann et al. 2015).

In the scientific discourse on regionalization there are three central objectives for these reform efforts: in the modernizing state, the regionalization strategy is supposed to contribute to the *competitiveness of the region* and to the *development of school quality*, as well as to provide *compensatory action for more educational equity* (Emmerich 2011).[1]

[1]Here, we abstain from critically discussing the objectives of regionalization measures that are based on social integration (cf. Emmerich 2011; Manitius 2013).

Theoretically, the scientific descriptions of the idea of regionalization in the education sector mainly rely on the governance perspective, more precisely on the regional governance approach (Fürst 2004; Berkemeyer and Pfeiffer 2006; also Tibussek in this book). In this theoretical perspective, particular focus is placed on the network constellations and activities of intermediary governing bodies, such as local education offices, that develop outside the traditional structures of the state and municipality. Recent publications try to better capture the potential for conflict that is inherent to these often rather complex constellations, for instance by drawing on the image of "social arenas" (Strauss et al. 1964; see also Brüsemeister 2014). Finally, attempts can be identified that try to turn more attention to the concrete activities the actors are pursuing by drawing on management theories (Otto et al. 2015) or network approaches such as boundary spanning (Manitius et al. 2013).

Theories of justice are so far mostly disregarded in the scientific description, and educational science lacks a clear notion of equity in respect to the regionalization strategy and its justice-based merits. When describing the phenomenon, the scientific discourse so far fails to include approaches taken from theories of justice. One exception is Berse (2009; see also Oelkers et al. 2008): referring to Sen's capability approach (2007), he mentions justice as an important criterion to assess the merits of regionalization efforts.

In the following, we try to specify and theoretically trace the possible justice-enhancing achievements of the support strategy of *regionalization* with a focus on the school system (for further details see Manitius 2013).

Regionalization and Justice-Based Support Services for School Development Processes

If regionalization can be understood as an institutional strategy for developing the school system, one should further investigate which dimensions of justice within the education system these schemes relate to. Four theory-based dimensions of justice within the education system can be distinguished (Berkemeyer et al. 2012; Manitius 2013): power of integration/integration effects, permeability, promoting skills and awarding certificates.

The *power of integration* of school systems reflects whether school systems succeed in systematically including all children, for instance whether all children and teenagers visit regular schools, and the extent to which their social integration and participation is possible, for instance through whole-day schooling.

The dimension of *permeability* mainly highlights the allocative function of school systems. It asks to what extent selection processes are carried out independently from socio-economic characteristics and how much the constitution of

the system itself (e.g. the schools available in a region) contributes to distortions in the allocation process.

The dimension of *promoting skills* mainly considers the output of school systems. Promoting skills in a fair way does not allow system-induced one-sided support, but requires the development of all students' potential, irrespective of their social characteristics.

Finally, *awarding certificates* reflects the extent to which graduation certificates, which are important for social participation, are awarded adequately in relation to the demanded requirements and comparably across regions.

Based on an understanding of regionalization measures as support, we furthermore need to ask how far they really offer justice-based services for the school system, i.e. to what extent the support aims to promote the dimensions of power of integration, permeability, promoting skills and awarding certificates. Several examples of such support in respect to the justice dimensions can be theoretically deduced (see Table 1).

Empirical Evidence: Local Education Offices as School Development Actors

Against the background of the presented support potential of regionalization strategies regarding the justice dimensions, we will present empirical results on a central regionalization actor in the German *Land* of North-Rhine Westphalia (NRW): the local education office. As a whole, there is little research on the merits of regionalization measures in the education sector. Qualitative case studies dominate which explore the actor constellations and structures that develop in the framework of the regionalization measures or which try to identify conditions for the success of these measures (for an overview of the literature see Jungermann et al. 2015).

In order to nevertheless gain empirical insights into the services of central regionalization actors, in the following we present the results of a baseline survey of all local education offices in NRW that was undertaken in cooperation with the Ministry for School and Further Education. We focus on the questions of which services this actor offers in regard to which justice dimension, who these services are targeted at and which goals are associated with them. We chose this actor because it is established in almost all of the 53 regional administrative entities in NRW and has for some time now been attributed a central role in school-centered regionalization efforts.

The baseline study of the local education offices in NRW was conducted in autumn 2011 using a standardized questionnaire. In total, 46 local education offices were surveyed (Manitius et al. 2013). The response rate for the directors' questionnaire on general and structural questions was 95.7 % (n = 44), whereas the response rate of the questionnaire for all employees was 74 % (n = 217).

Table 1 Examples for justice-based support services for the education system through regionalization (*Source* Own representation)

Supported justice dimension of the education system	Examples for support services of regionalization strategies
Power of integration	*Inclusive schooling*: • Determine specific needs of the municipality for inclusive schooling and generate adequate solutions, e.g. consultation with experts • Multiprofessional composition of local education offices (administrative and pedagogical personnel) is beneficial for coordinating local inclusion planning, e.g. concerning infrastructure and development of pedagogical concepts • Initiate local discourse on the merits of the social norm of inclusive schooling, e.g. in networked discussion forums or specific consultation *Develop whole-day schooling programs*: • Generate synergy effects, for instance through integrated local sectoral planning, e.g. to coordinate logistical needs • Develop a cooperative youth welfare and school development plan • Create networks between schools and their partners across institutional borders to initiate dialogue on the improvement of school quality (e.g. linking instruction and extracurricular activities)
Permeability	• Create, develop and maintain inter-organizational networks to improve the transition between educational institutions • Stimulate professional cooperation (e.g. school-to-school networks for peer observation of teaching between primary and secondary schools) • Cross-institutional data-monitoring to diagnose specific needs at the transition points in respect to horizontal and vertical permeability • Initiate dialogue between experts on diagnosis (scientists, teacher trainers) and teachers to improve assessment practice • Create adequate consulting services for parents and students
Promoting skills	• Initiate, develop and maintain school-to-school networks for subject-based instruction improvement, for instance between schools and supervision • Manage professional development (identifying external experts, establishing contact with trainers and scientists) • Instruction-related data-management (e.g. data on the quality of instruction such as school inspection reports, independent enquiries such as student surveys) in a dialogue for school development that respects all stakeholders
Awarding certificates	• Closely related to permeability services (transition management) • Assuring further opportunities and adequate job offers, especially for students leaving without a certificate

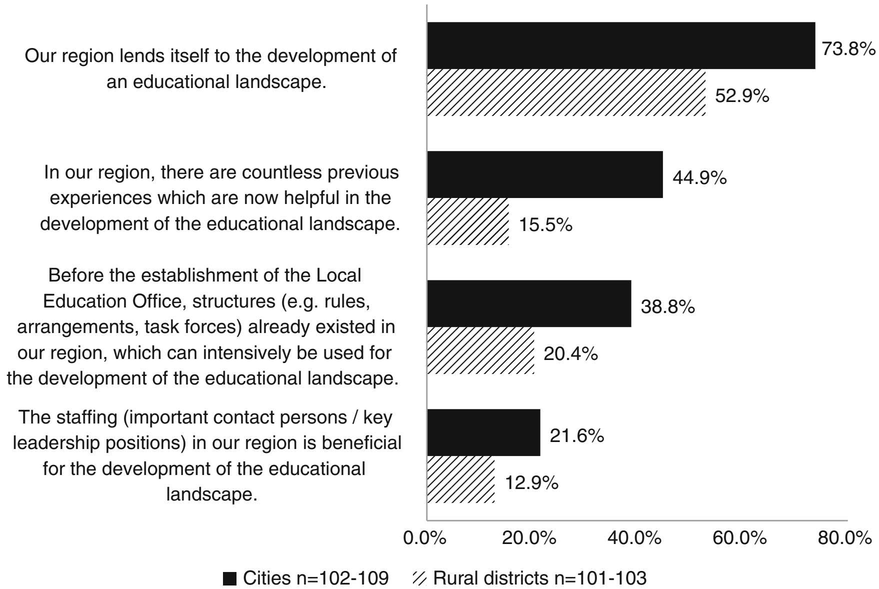

Fig. 1 Employees' assessment of regional circumstances (reply: "agree") (*Source* Own representation)

Objectives and Target Groups

When asked about the most important objectives for their work, most employees agree to the programmatic goals of regionalization: the *improvement of life chances* (77.6 %) and the *better use of resources through networking* (77.7 %) are identified especially often as guiding objectives for their work. Less often, they mention the *development of instructional quality* (19.2 %) and the contribution to *safeguarding the economic competitiveness* of the region (8.9 %) as important goals.

Concerning the target groups of the local education offices' activities, the directors first and foremost mention *heads of schools* (88.4 %) and the *Steering Circle*[2] (88.4 %) as well as the *local branch of school supervision* (76.2 %). Other frequently mentioned target groups are *teachers* (67.4 %), internal partners such as *other employees/direct colleagues* (71.1 %) or the *school administration* in general (63.4 %). Partners outside the school systems, such as *businesses*, *associations* or the *youth welfare services* are indicated by around half the local education offices as a frequent target group. *Students* (40.5 %), *parents* (11.9 %) or *competence teams*[3] (35.7 %) are mentioned as target groups significantly less often.

[2]The Steering Circle is a formally established governing body involving important local decision-makers which sets the relevant political guidelines for developing the educational landscape.

[3]Competence teams are local peer-to-peer professional development teams in NRW.

Fields of Action

Local education offices mainly focus their work on transition topics. The most commonly mentioned fields of action are the *transition from school to work place* (86 %), the *transition from pre-school to primary school* (74.4 %) and the *transition from primary school to secondary school* (62.8 %). The directors also mention network activities promoting the cooperation between different institutions as frequent fields of action, such as the *cooperation of schools with each other* (51.2 %) or the *cooperation of schools and youth welfare services* (48.8 %). They also identify *inclusion* (60.5 %) as a prevalent field of action, which is not surprising given its current political topicality. The *development of all-day schooling* (35.7 %) or the *interdisciplinary qualification of teachers* (27.9 %), however, are less frequent fields of action.

The employees of the local education offices were also asked how often they use new governance tools in their daily work. As a whole, instruments such as *school inspections* or *standardized region-wide tests* (3.9 %) play a subordinate role in the work processes. If available, *municipal education monitoring reports* are indicated by 39 % of the employees as frequently used tools.

Knowledge on School Development in the Region and on Regional Circumstances

When analyzing the knowledge of local education office employees on the development of the schools in their region, one can see that they are especially well informed on the *development of student numbers* (80.5 %) and the *challenges the schools are facing* (74,6 %). They are less informed on the *schools' development plans* (39.8 %) and their *professional development needs* (31 %). Only 24.4 % of employees indicate they can assess the *quality development* of the schools in their region.

Concerning the assessment of regional circumstances, one can see that all relevant items are assessed less positively by employees of local education offices located in rural districts than by employees of local education offices in cities. Only very few employees estimate the *staffing of key leadership positions* in the region as advantageous (see Fig. 1).

Discussion and Outlook

The principal goal of the baseline survey on local education offices in NRW was to identify some initial evidence on the organization and operations of this actor. Therefore, we abstained from integrating and empirically verifying theoretical constructs based on theories of justice. Since the main programmatic objective and guiding principle of the current regionalization tendencies is educational equity and

justice (Jungermann et al. 2015), in this paper we theoretically considered what could be justice-based support services of this reform strategy for the school system. In the next step, the descriptive evidence from the baseline survey on a central actor of the regionalization efforts in the education sector can be discussed with regard to their relevance to the four dimensions of justice in school systems.

On the whole, the evidence suggests that local education offices are mainly involved in networking activities and at interorganisational boundaries (see also Manitius et al. 2013). The offices' fields of action focus on institutional transitions within educational biographies, and therefore relate to aspects of permeability of school systems and indirectly to awarding certificates, as theoretically assumed. Regarding the power of integration, the current prevalence of inclusion was already mentioned as a frequent field of action. All-day schooling is a comparatively less frequent area of work of local education offices. The evidence also indicates, that promoting skills plays a subordinate role in their work. This becomes clear in employees' relatively low agreement to regionalization objectives concerning the development of instructional quality. Correspondingly, important central tools for improving school quality (such as the school inspection reports) are less often used by local education offices. It has to be considered, however, that access to these reports is structurally somewhat limited for municipal actors. In addition, the employees' knowledge of the regional school landscape suggests that they are well informed on the schools' challenges, but less so on their quality development.

Regarding the justice dimensions, this initial approximation to the support services of a specific actor of regionalization allows for the conclusion that the activities of local education offices are particularly targeted towards the permeability of the school system. At the same time, the idea of close cooperation among all relevant actors that is inherent in regionalization strategies is beneficial for all four justice dimensions. Thanks to the network structures of regionalization measures they can potentially be said to have an added benefit regarding justice (for criticism of this see Manitius 2013; Stolz 2009). Further research is, however, necessary in order to analyze the merits of the "development trend of regionalization" in relation to the justice dimensions in a more differentiated way (as illustrated in Table 1). This would also allow to better consider the point of view of the recipients of these services (e.g. schools, individual teachers or students).

Bibliography

Berkemeyer, N., & Manitius, V. (2013). Gerechtigkeit als Kategorie in der Analyse von Schulsystemen – das Beispiel Chancenspiegel. In K. Schwippert, M. Bonsen, & N. Berkemeyer (Eds.), *Schul- und Bildungsforschung. Diskussionen, Befunde und Perspektiven* (pp. 223–240). Münster etc.: Waxmann.

Berkemeyer, N., & Pfeiffer, H. (2006). Regionalisierung – Neue Steuerungs- und Kooperationsstrukturen für die Schulentwicklung. In W. Bos, H. G. Holtappels, H. Pfeiffer, H.-G. Rolff, & R. Schulz-Zander (Eds.), *Jahrbuch der Schulentwicklung Band 14. Daten, Beispiele und Perspektiven* (Vol. 14, pp. 161–194). Weinheim: Juventa.

Berkemeyer, N., Bos, W., & Manitius, V. (2012). *Chancenspiegel. Zur Leistungsfähigkeit und Gerechtigkeit der deutschen Schulsysteme*. Gütersloh: Bertelsmann Stiftung.

Berse, C. (2009). *Mehrdimensionale Bildung im Kontext Kommunaler Bildungslandschaften. Bestandsaufnahme und Perspektiven*. Opladen & Farmington Hills: Budrich.

Brüsemeister, T. (2012). Educational Governance: Entwicklungstrends im Bildungssystem. In M. Ratermann & S. Stöbe-Blossey (Eds.), *Governance von Schul- und Elementarbildung. Vergleichende Betrachtungen und Ansätze der Vernetzung* (Vol. 16, pp. 27–44). Wiesbaden: Springer.

Brüsemeister, T. (2014). *Soziale Welten/Arenen als Möglichkeit der Konzeptionalisierung von regionalen Bildungsprogrammen (LvO).* Vortrag im Forschungskolloquium des Instituts für Schulentwicklungsforschung Dortmund. 06 March 2014.

Deutscher Städtetag. (2007). *Kongress „Bildung in der Stadt" des Deutschen Städtetages am 22./23.11.2008 in Aachen. Forum 6: Von der Schulträgerschaft zur regionalen Bildungslandschaft. Bildung kommunal gestalten!* Summary of results. http://www.staedtetag.de/imperia/md/content/veranstalt/2007/72.pdf. Accessed 27 February 2011.

Emmerich, M. (2011). Bildungsregion. In S. Rahm & C. Nerowski (Eds.), *Enzyklopädie Erziehungswissenschaft Online. Fachgebiet: Schulpädagogik, Schule: Geschichte, theoretische Grundlagen, empirische Befunde, Diskursfelder*. Weinheim: Juventa.

Fürst, D. (2004). Chancen der Regionalisierung im Bildungsbereich: Regional Governance – ein neuer Ansatz der Steuerung regionaler Entwicklungsprozesse. In W. Lohre, G. Engelking, Z. Götte, C. Hoppe, U. Kober, P. Madelung, D. Schnoor, & K. Weisker (Eds.), *Regionale Bildungslandschaften: Grundlagen einer staatlich kommunalen Verantwortungsgemeinschaft* (pp. 35–55). Troisdorf: Bildungsverlag EINS.

Honneth, A. (2011). *Das Recht der Freiheit. Grundriß einer demokratischen Sittlichkeit*. Berlin: Suhrkamp.

Jungermann, A., Manitius, V., & Berkemeyer, N. (2015). Regionalisierung im schulischen Kontext – Ein Überblick zu Projekten und Forschungsbefunden. *Journal for Educational Research Online, 7*(1), 14–48.

Manitius, V. (2013). *Regionalisierung und Gerechtigkeit? Eine Betrachtung auf Chancen und Risiken entlang theoretischer und empirischer Hinweise*. Technische Universität Dortmund. Dissertation. http://hdl.handle.net/2003/31154

Manitius, V., Jungermann, A., Berkemeyer, N., & Bos, W. (2013). Regionale Bildungsbüros als Boundary Spanner – Ergebnisse aus einer Bestandsaufnahme zu den Regionalen Bildungsbüros in NRW. *Die Deutsche Schule, 3*(105), 276–295.

Oelkers, N., Otto, H.-U., & Ziegler, H. (2008). Handlungsbefähigung und Wohlergehen: Der Capabilities-Ansatz als alternatives Fundament der Bildungs- und Wohlfahrtsforschung. In H.-U. Otto & H. Ziegler (Eds.), *Capabilities – Handlungsbefähigung und Verwirklichungschancen in der Erziehungswissenschaft* (pp. 85–89). Wiesbaden: VS.

Otto, J., Sendzik, N., Berkemeyer, N., Bos, W., & Järvinen, H. (2015). *Kommunales Netzwerkmanagement. Forschung, Praxis, Perspektiven*. Münster: Waxmann.

Rawls, J. (1971). *A Theory of Justice*. Cambridge: Harvard University Press.

Sen, A. (2007). *Ökonomie für den Menschen. Wege zur Gerechtigkeit und Solidarität in der Marktwirtschaft*. Munich: Hanser.

Stolz, H.-J. (2009). Gelingensbedingungen lokaler Bildungslandschaften. Die Perspektive der dezentrierten Ganztagsbildung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften. Perspektiven für Ganztagsschulen und Kommunen* (pp. 105–119). Wiesbaden: VS.

Strauss, A., Schatzman, L., Bucher, R., Ehrlich, D., & Sabshin, M. (1964). *Psychiatric ideologies and institutions*. Glencoe, Il: The Free Press.

Organised After-School Activities at the Intersection between Education and Municipalities in Rural Areas

Holger Jahnke and Katharina Hoffmann

Abstract The concurrence of a growing awareness of educational issues, demographic decline and increasing competition is presenting schools and municipalities in rural areas with particular challenges. The much-cited saying "The village dies along with the school" implies that the future of the community around the school site is closely linked to the development of the school, as the drop in births seems to threaten the existence not only of many schools but also of many municipalities. With parents being given free choice between schools since 2007, many rural schools in Schleswig-Holstein have found themselves in competition for a dwindling resource: pupils. Some municipalities have responded to this challenge with active strategies for investment in order to attract pupils. At the same time, the division between responsibility for internal and external school affairs has prevented the municipalities from exerting any direct influence on pedagogical staff, which is crucial to the pedagogical quality of teaching, especially in small schools. With regard to opportunities to raise schools' profiles, being able to give shape to OGS activities is thus an important means of influencing school quality in rural areas. Thanks to networks and cooperation, local actors and institutions are involved in pedagogical work, acting as the nucleus of more extensive local or municipal educational landscapes. This provides a formal framework for the symbiotic relationship between the school and the municipality which can be built up as part of the shared struggle to attract pupils and young families.

Keywords Rural school · All-day schooling · Rural areas · Demographic change · Education landscapes · School districts · Free school choice

H. Jahnke (✉) · K. Hoffmann
Interdisciplinary Institute for Environmental, Social and Human Studies – Geography Department, Europa-University Flensburg, Auf dem Campus 1, 24943 Flensburg, Germany
e-mail: holger.jahnke@uni-flensburg.de

K. Hoffmann
e-mail: katharina.hoffmann@uni-flensburg.de

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In the context of the change in the education system which can currently be observed, schools are increasingly being understood as focal points for social and cultural life in rural areas. If schools are seen at the same time as places where people learn and live their lives, for some school locations this will mean opening up to other education providers, especially in the field of non-formal education (Wichmann 2012).

In this fundamental change, education today is understood as a resource for high-quality schooling oriented towards skills and future developments. Thus, education policy, especially in rural areas not only targets at pedagogical goals, but also serves communal interests. As lifestyles change (e.g. dual-income couples, changes in the pattern of care) along with demographics and the corresponding drop in pupil numbers, schools have been seen as central pull factors in rural communities (Frank 2011; Stolz 2012). The development of school sites has thus become a central field of action in the competition between municipalities, especially in their struggle to attract young families.

In this field of conflict with declining pupil numbers and the resulting competition between schools, new and creative forms of cooperation are springing up between providers in the fields of education and culture. They are discussed in politics and academia under the heading of municipal or local "educational landscapes" (Bildungslandschaften) (Bleckmann and Durdel 2009). Here, central importance is placed on optional after-school activities (*Offenes Ganztagsangebot*, OGT), designed to add to the standard German school day which traditionally ends at lunchtime: on the one hand it is a sign of the school opening up as a space to its local surroundings, on the other it develops an important space in which educational offerings can be displayed, enhancing a location's attractivity and competitiveness.

This chapter is based on two surveys carried out by the authors as part of a project on regional public services in the rural district of Schleswig-Flensburg in 2012 and 2013 (cf. Jahnke and Hoffmann 2012, 2013). Building on documentary records of educational and cultural institutions, expert discussions were held at all thirteen authorities (*Amt*; a group of municipalities), two independent municipalities and three towns in the district. These single or group interviews with key actors were focussing on forms of cooperation between educational and cultural institutions. The aim of this investigation was to make a survey of existing cooperative ventures between institutions involved in education and culture, in the broadest sense; to pinpoint best-practice examples and thus to identify starting points for creating local educational landscapes.

Schools in Rural Areas Under Pressure from Decreasing Pupil Numbers

The debate on school closures has been held since German reunification; first in Eastern federal states and later also in the West. It was provoked by demographic developments which have differed widely from state to state. Figure 1 reveals three

trends based on developments in the number of children of standard primary school age (5–9). In the East German federal states apart from Berlin, the drop in births after German reunification became visible from as early on as the mid-1990s through a rapid decline in numbers in the age group in question: within just a few years it had dropped to less than half in many regions, and even down to 37 % in Mecklenburg-Vorpommern (Weishaupt 1997; Fickermann et al. 1998). Now that the school systems in most areas have been fully restructured, especially in rural parts, a slight rise in the number of schoolchildren can be observed again in these federal states. In West German states, the negative trend set in later and was less extreme at first, before accelerating in recent years to what has become now a clear period of decline. In the area of investigation, Schleswig-Holstein, both trends—the delayed start and the negative development which followed—have been more distinct and further decline is expected for the years to come.

Developments in the city-states of Hamburg and Berlin have been quite different. At first, they followed the trends going on in the East and West, respectively, but now they have consolidated at different levels, and are even showing a slight rise in pupil numbers. This stable or even positive demographic trend can largely be explained by the higher percentage of residents of immigrant origin, who today make up a large part of rising birth numbers in many cities.

The trends in primary school pupil numbers underline the different consequences of educational policy and planning in urban conurbations and rural peripheries. Put simply, educational discourses in urban spaces primarily pertain to coping with social, socio-economic or socio-cultural challenges in the areas considered to be "difficult" neighbourhoods. In an urban context, educational institutions in general, and schools in particular, are frequently seen in normative terms with regard to their possible and actual role in neighbourhood processes of social integration in a heterogeneous, unintegrated urban migration society. In contrast, discussion on

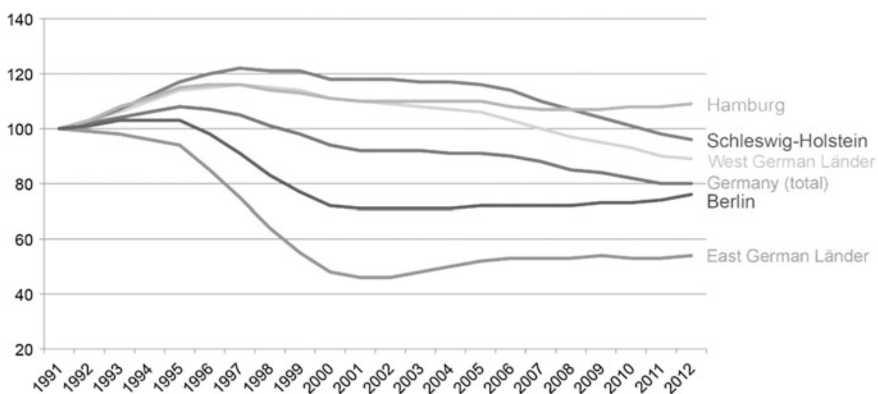

Fig. 1 Trend in the number of 5–9-year-olds between 1991 and 2012 in selected federal states (index values 1991 = 100) (*Data source* Statistisches Bundesamt; author's own calculation and design)

school sites in rural areas currently tends to focus on the aspect of possible school closures, economic profitability, providing the region with sufficient schooling and their competitiveness in attracting young families to the area in the face of a shrinking, ageing population.

In Schleswig-Holstein the decline in pupil numbers has been felt at all levels of the school education system for about 10 years; the discussion there is about adapting the schools network on different levels from the point of view of state educational planning. In the mid-1990s, the drop in pupil numbers occurred in the cities of Kiel, Flensburg and Lübeck; for about the last 10 years it has mainly affected primary schools in the sparsely populated rural areas. In the rural districts of Dithmarschen and Steinburg, for example, the number of primary schoolchildren dropped by one quarter within just a few years—and the trend is holding up (data source: Statistikamt Nord, cf. Frank 2011).

Rural Schools and Communities of Schleswig-Holstein in Competition

At the height of this phase of decline, in 2007 the then state government passed a new Schools Act establishing the administrative framework for the structure of competition between state schools. Until that point, private school maintaining bodies had been few in Schleswig-Holstein, apart from the schools for the Danish minority, which enjoy a special status on historical grounds. Now, educational policy followed the logic of deregulation, according to which competition would lead to better quality on the one hand, and greater economic efficiency on the other. Three initial, key legal parameters set the course for this:

First, *free parental school choice* was introduced for all types of schools, putting an end to the school catchment areas, with each household being assigned to a specific school. Since then, parents have been able to register their children at any school of their choice, without any explanation or justification.

Second, *compensatory payments* were fixed, to be paid by the local authority where a pupil lives, to the local authority where that pupil attends school. Initially, these were paid in the form of a lump sum; since 2012 they have been calculated based on the actual running costs. Put simply, this makes better-equipped schools more expensive than basically equipped schools for the local authority of origin.

Third, statutes were passed establishing *minimum pupil numbers* for all school types. If they are undershot, then the school or school site may be merged administratively with one or several other sites, or may be closed entirely. This regulation does not apply to schools run by private providers or the Halligen and island schools. An “experiment clause” also provides for transitional periods.

In many ways, the introduction of competition mechanisms between schools can be viewed as problematic; at the least, the positive effects expected on the quality of education will not automatically take place. This chapter looks into the specifics of this kind of mechanism in rural peripheral areas. After all, as schools enter into a situation of competition due to the abolishment of catchment areas, urban and rural areas face different challenges. In urban contexts, the main problem is the rising risk of school segregation, in a self-reinforcing process whereby attractive schools become more selective and schools in socially disadvantaged neighbourhoods become a focus for pupils, who might need more support. By contrast, in rural areas the large geographical distances between individual school sites create a significant barrier to selecting or changing schools.

In rural areas, demographic change is leading not only to a decline in pupil numbers—and thus to greater competition between the schools—but also to a change in the age structure and, in a second step, a general drop in population figures. As the two processes are closely linked, this produces a structural connection between the school and the local authority. In contrast with schools in cities, schools in small municipalities usually have much closer ties to community life. In small villages, the primary school may be the centre not only of educational and cultural events but also of the village community's social life (e.g. cf. Neu 2007; Meusburger 2009; Jahnke and Hoffmann 2013). On one hand, cultural events often take place on the school grounds; on the other, thanks to the pupils and parents, the school as an institution is a central point for social encounters and the integration of newcomers to the area.

The investigation showed that at municipality level within the district of Schleswig-Flensburg, there is now a keen sense of the importance of educational institutions when competing to attract young families. In the public discourse, mayors thus fight to retain their own school sites; as school providers, they also try to make their school more attractive in the competition for pupils by investing in the building and infrastructure. There are also cases in which municipalities organise and pay for free pupil transport from neighbouring areas, to keep pupil numbers at their own school stable, or even raise them. Education is thus increasingly being seen by municipalities as an investment in the future, part of a locational competition succumbing to a more entrepreneurial logic (cf. Jahnke and Hoffmann 2012).

There are, however, limits to the extent to which municipalities can raise their own school's profile, as the municipality has no influence on teaching staff appointments. Due to the separation set down by law between the Ministry of Education on the one hand, which is responsible for *internal school affairs* (including appointing teaching staff) and the municipality, as the school maintaining body, on the other, which is responsible for *external school affairs* (buildings and infrastructure, operating costs and administrative staff), the maintaining body has no direct influence on the most important parameter for the quality of a school: the teaching staff.

Organised After-School Activities (OGT) as a Field of Action Shared by Schools and Municipalities in Rural Areas

Since 2003 there has been an increasing development of organised after-school activities under the name of "voluntary all-day schools" (Offene Ganztagsschule, OGS) which offer optional, extracurricular educational activities, extending the German school day to the afternoon. In Schleswig-Holstein this has resulted in new opportunities for profiling local schools. On one hand, the municipalities support this by providing funding; on the other hand it provides them with chances to raise their profile through the OGS activities on offer. The OGS opens up opportunities for developping the pedagogical profile of a school independently of the teaching staff assigned by the Ministry of Education. All-day schooling thus becomes a place of entrepreneurial activities which the school maintaining body can influence by submitting applications, planning, "staff management" and involving parents to share some of the costs. However, as there is no permanent financing for pedagogical staff, the maintaining bodies depend upon cooperation with local institutions, volunteers and services provided on an ex gratia basis.

In the relevant research literature, there is a great deal of discussion on the OGS as a means of providing cross-institutional education and care throughout the day at primary and lower secondary education levels (e.g. Bertelsmann Stiftung 2013; Eisnach 2011; Lange 2013). In the jurisdiction of the district of Schleswig-Flensburg, the OGS is often put into practice as the central focus of cooperation between schools and other education providers in the area around the municipalities. The OGS sphere can be seen to some extent as a test area for local educational governance, as it offers a place where local actors and institutions from education, culture and social work can meet. The OGS has thus developed into a shared field of action for national and regional educational policy. This common educational policy was supported by the Federal Ministry of Education and Research (BMBF) under the OGS development investment programme "Zukunft Bildung und Betreuung" (Future of Education and Care) and eventually cofinanced by the individual regional states. Another background to the OGS is that it is an institutional expression of the broad-ranging and open understanding of education and culture at the heart of rural educational landscapes (Oelerich 2007, p. 33). Its central significance correlates with its function as a place to negotiate processes relating to society as a whole; as an arena for competition resulting from the competitive structures in which schools are involved, and as a major test area for a school-centred educational landscape. These ascribed meanings should be briefly explained.

The field of OGS is a sphere of action which gives an institutional form to the intersection between, formal education, non-formal education and informal learning (e.g. cf. Eisnach 2011, p. 9). This allows educational biographies to be supported beyond the rhythm of school lessons, and helps identify and build on preferences and strengths. The school as an institution cannot meet the needs of all-day care and education all on its own, and is thus forced to rely on cooperative

partnerships. The OGS thus helps the school to open up geographically to its surroundings und at the same time sees itself as an open place of public learning and communal life (see below).

This all-day system for organising care and education is at the heart of rural educational and cultural landscapes in both organisational and spatial terms. The first reason for this is that the all-day system provides an opportunity to pick up on trends affecting society as a whole, e.g. changes in people's living situations, or dual-income families. This means that they can offer new childcare and education services. As the demographic change described in the second section takes hold, schools are increasingly competing against one another for pupils.

Secondly, the OGS provides municipalities with a means of competition by developing attractive schools. This extensive creative opportunity, effectively a forum for trying out new ideas, comes hand in hand with the definition of the OGS adopted by the Standing Conference of the Ministers of Education and Cultural Affairs of the Regional States (KMK), and with the funding guidelines for the federal state of Schleswig-Holstein. The guidelines and definition are limited to organisational stipulations; the specific content and pedagogical form are under the responsibility of the individual school (MBW 2013, p. 1f.; KMK 2014, p. 4f.). Thus, schools and municipalities which, in view of municipal developments, take an active role in education processes (Eisnach 2011, p. 33) view the OGS as a shared "opportunity for combining educational and cultural activities geared towards the social space" (ibid., p. 91). Together, they are given leeway for developping a locally adapted, cultural and educational profile which eventually might impact on the demographic development as well.

Thirdly, the OGS scheme provides an important space for experimentation and action, rendering the variety of educational and cultural schemes more visible to the authorities. As a constitutive element in the development and extension of educational and cultural landscapes at the level of the authorities and the district, the OGS is a multifaceted platform for provisions combining various forms of cooperation within a local network. Their agenda ranges from general childcare, homework help, lunches and supervised play to a wide range of pedagogical activities.

All in all, the OGS appears to be a beacon of hope for an established, practised educational and cultural landscape. However, it should not be forgotten that this organisational form of interlinked educational and cultural work is caught up in high expectations regarding broader social processes. At the same time there is an increasing call for and promotion of professionalisation on the part of volunteers, who play a pivotal role in non-formal and even formal education in rural areas.

Conclusion

The coincidence of a growing awareness of educational issues, demographic shrinkage and increasing competition is presenting schools and municipalities in rural areas with particular challenges. The much-cited saying "The village dies

along with the school" implies that the future of the communities around the school sites is closely linked to the development of the local school, as the drop in births threatens the existence not only of the schools but also of the municipalities.

With parents being given free choice between schools since 2007, the schools in Schleswig-Holstein have entered in competition for a dwindling resource: pupils. Some municipalities have responded to this challenge with active strategies for investment in order to attract pupils. At the same time, the division between responsibility for internal and external school affairs has prevented the municipalities from exerting any direct influence on pedagogical staff, which is crucial to the pedagogical quality of teaching, especially in small schools.

With regard to opportunities to raise schools' profiles, being able to give shape to OGS activities is thus an important means of influencing school quality in rural areas. Thanks to networks and cooperation, local actors and institutions are involved in pedagogical work, acting as the nucleus of more extensive local or municipal educational landscapes. This provides a formal framework for the symbiotic relationship between the school and the municipality which can be built up as part of the shared struggle to attract pupils and young families.

Bibliography

Bleckmann, P., & Durdel, A. (2009). Einführung: Lokale Bildungslandschaften – die zweifache Öffnung. In P. Bleckmann & A. Durdel (Eds.), *Lokale Bildungslandschaften: Perspektiven für Ganztagsschulen und Kommunen* (pp. 11–18). Wiesbaden: VS.

Eisnach, K. (2011). *Ganztagsschulentwicklung in einer kommunalen Bildungslandschaft: Möglichkeiten und Grenzen von Unterstützungsstrukturen*. Wiesbaden: VS.

Fickermann, D., Weishaupt, H., & Zedler, P. (1998). Kleine Grundschulen in Deutschland: Rückblick und Ausblick. In D. Fickermann (Ed.), *Kleine Grundschulen in Europa. Berichte aus elf europäischen Ländern* (pp. 7–34). Weinheim: Beltz.

Frank, K. (2011). *Schulentwicklungsplanung im demografischen Wandel. Am Beispiel der Kreise Dithmarschen und Steinberg*. Kiel.

Jahnke, H., & Hoffmann, K. (2012). *Sachstand der Befragung zu Kooperationen im Bereich Bildung/Kultur. Eine qualitative Datenerhebung*. Published final report.

Jahnke, H., & Hoffmann, K. (2013). *Handlungsorientierungen auf der Basis qualitativer Analysen ausgewählter Best-practices bestehender Kooperationen*. Published final report.

KMK—Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland (Ed.) (2014). *Allgemein bildende Schulen in Ganztagsform in den Ländern in der Bundesrepublik Deutschland*. http://www.kmk.org/fileadmin/pdf/Statistik/Dokumentationen/GTS_2012_Bericht.pdf. Accessed 25 May 2014.

Lange, V. (2013). *Gute Ganztagsschulen – Modelle für die Zukunft!? Mit einem Überblick über Status quo und Perspektiven aus allen 16 Bundesländern*. http://www.fes.de/studienfoerderung/hochschul-und-bildungspolitik/hochschul-und-bildungspolitik/publikationen/ganztagsschulen_fes_2013.pdf. Accessed 15 March 2014.

MBW—Ministerium für Bildung und Wissenschaft des Landes Schleswig-Holstein. (2013). *Richtlinie zur Genehmigung und Förderung von Offenen Ganztagsschulen sowie zur Einrichtung und Förderung von Betreuungsangeboten in der Primarstufe und im achtjährigen gymnasialen Bildungsgang*. http://www.schleswig-holstein.de/Bildung/DE/Rund_um_Schule/Ganztagsschulen/Material/Downloads/Richtlinie_Ganztagsbetreuung__blob=publicationFile.pdf. Accessed 16 March 2014.

Meusburger, P. (2009). Wenn in der Schule das Licht ausgeht. *Schule im Blickpunkt*, 2009/2012 (1), 16–20.

Neu, C. (2007). Schule als Kristallisationspunkt im ländlichen Raum. *Ländlicher Raum, 58*(5/6), 82–85.

Oelerich, G. (2007). Ganztagsschulen und Ganztagsangebote in Deutschland – Schwerpunkte, Entwicklungen und Diskurse. In F. Bettmer (Ed.), *Ganztagsschule als Forschungsfeld: theoretische Klärungen, Forschungsdesigns und Konsequenzen für die Praxisentwicklung* (pp. 13–39). Wiesbaden: VS.

Stiftung, B. (2013). *Ganztagsschulen in Deutschland – eine bildungsstatistische Analyse*. http://www.bertelsmann-stiftung.de/cps/rde/xbcr/SID-CBC9E179-98E22B05/bst/xcms_bst_dms_38554_38555_2.pdf. Accessed 15 May 2014.

Stolz, H.J. (2012). Bildung neu denken! Kritische Anmerkungen zu aktuellen Ansätzen lokaler Bildungslandschaften und mögliche Alternativen. In P. Bleckmann & V. Schmidt (Eds.), *Bildungslandschaften. Mehr Chancen für alle* (pp. 21–31). Wiesbaden: VS.

Weishaupt, H. (1997). Folgen der demographischen Veränderungen für die Schulentwicklung in den neuen Bundesländern. In H. H. Krüger & J. H. Olbertz (Eds.), *Bildung zwischen Staat und Markt* (pp. 607–619). Opladen: Leske und Budrich.

Wichmann, M. (2012). Über den Schulhof hinaus. Das Verhältnis von Ganztagsschule und Bildungslandschaft und wie beide voneinander profitieren können. In P. Bleckmann & V. Schmidt (Eds.), *Bildungslandschaften. Mehr Chancen für alle* (pp. 73–87). Wiesbaden: VS.