UNIVERSITIES, THE CITIZEN SCHOLAR AND THE FUTURE OF HIGHER EDUCATION

Edited by James Arvanitakis
and David J. Hornsby

Universities, the Citizen Scholar and the Future of Higher Education

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Series Editor's Preface

The *Critical University Studies Series* has a distinct and clear agenda. The overarching intent is to foster, encourage and publish scholarship relating to universities that is troubled by the direction of reforms occurring around the world.

It is clear that universities everywhere are experiencing unprecedented changes. What is much less clear – and there are reasons for the lack of transparency – are the effects of these changes within and across a number of domains, including

- the nature of academic work
- students' experiences of learning
- leadership and institutional politics
- research and the process of knowledge production
- the social and public good.

Most of the changes being inflicted upon universities globally are being imposed by political and policy elites without any debate or discussion, and with little understanding of what is being lost, jettisoned, damaged or destroyed. Benefits, where they are articulated at all, are framed exclusively in terms of short-term political gains. This is not a recipe for a robust and vibrant university system.

What this series seeks to do is provide a much-needed forum for the intensive and extensive discussion of the consequences of ill-conceived and inappropriate university reforms. It does this with particular emphasis on those perspectives and groups whose views have hitherto been ignored, disparaged or silenced.

The defining hallmark of the series, and what makes it markedly different from any other series with a focus on universities and higher education, is its 'criticalist agenda'. This means that it directly addresses questions such as:

- Whose interests are being served?
- How is power being exercised and upon whom?
- What means are being promulgated to ensure subjugation?

- What might a more transformational approach look like?
- What are the impediments to this happening?
- What, then, needs be done about it?

The series intends to foster the following kind of contributions:

- Critical studies of university contexts, that while they might be local in nature, are shown to be global in their reach;
- Insightful and authoritative accounts that are courageous and that 'speak back' to dominant reforms being inflicted on universities;
- Critical accounts of research relating to universities that use innovative methodologies;
- Looking at what is happening to universities across disciplinary fields, and internationally;
- Examining trends, patterns and themes, and presenting them in a way that re-theorises and re-invigorates knowledge around the status and purposes of universities; and
- Above all, advancing the publication of accounts that re-position the study of universities in a way that makes clear what alternative robust policy directions for universities might look like.

The series aims to encourage discussion of issues such as academic work, academic freedom and marketisation in universities. One of the shortcomings of many extant texts in the field of university studies is that they attempt too much, and as a consequence, their focus becomes diluted. There is an urgent need for studies in a number of aspects with quite a sharp focus, for example:

1. There is a conspicuous absence of studies that give existential accounts of what life is like for *students* in the contemporary university. We need to know more about the nature of the stresses and strains, and the consequences these market-driven distortions have for the learning experiences of students, their lives and futures.
2. We know very little about the nature and form of how *institutional politics* are engineered and played out, by whom, in what ways and with what consequences in the neoliberal university. We need 'insider' studies that unmask the forces that sustain and maintain and enable current reform trajectories in universities.
3. The *actions of policy elites* transnationally are crucial to what is happening in universities worldwide. But we have yet to become privy

to the thinking that is going on, and how it is legitimated and transmitted, and the means by which it is made opaque. We need studies that puncture this veil of silence.

4. None of what is happening that is converting universities into annexes of the economy would be possible without a particular version of *leadership* having been allowed to become dominant. We need to know how this is occurring, what forms of resistance there have been to it, how these have been suppressed and the forms of solidarity necessary to unsettle and supplant this dominant paradigm.

5. Finally, and taking the lead from critical geographers, there is a pressing need for studies with a focus on universities as unique *spaces and places* – possibly in concert with sociologists and anthropologists.

We look forward to this series advancing these important agenda and to the reclamation and restitution of universities as crucial intellectual democratic institutions.

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Emeritus Professor, Federation University Australia

Contributors

Gavin R. Armstrong is a doctoral candidate in Biomedical Sciences at the University of Guelph, Ontario, Canada. He held a Fulbright Visiting Scholarship and a fellowship at Hunger Solutions Institute Fellowship, Auburn, USA, in 2013 and is currently Emeritus Entrepreneur for the Kirchner Fund the Food initiative. He is the founding CEO of Lucky Iron Fish, a for-profit company working to commercialise health innovations. For his humanitarian work, he has received a number of international awards including the William Jefferson Clinton Hunger Award (2011), the Michäelle Jean Emergency Hunger Relief Award (2012), Top 40 Under 40 in Guelph (2012) and the Mayor's Award (2013) for the City of Guelph.

James Arvanitakis is Dean of the Graduate Research School and Head of The Academy at University of Western Sydney (UWS), Australia, where he is also a professor in the Humanities and a member of the University's Institute for Culture and Society. He has spearheaded the establishment of The Academy – a unique programme across Australia – and its principles of future proofing education, inter-discipline and ethical leadership. His research areas include citizenship, resilience, piracy and the future of universities. In 2012, he was awarded the Prime Minister's University Teacher of the Year Award, and in the same year he received an Australian Research Council Discovery Grant. He is a visiting professor at the University of the Witwatersrand, Johannesburg, and a board member of the Public Education Foundation. He is also working with a collective of universities in India to establish a centre for research and teaching excellence. He is the editor of *The Citizen of the Twenty-First Century* (2014) and *Piracy: Leakages from Modernity* (2014).

Elisabeth (Liz) Brenner is an associate professor in the Science Faculty of the University of the Witwatersrand, South Africa. She has been involved in curriculum design for new courses implemented in the School of Molecular and Cell Biology and designed and taught courses in an outreach programme for grades 10–12 high school learners. She was the winner of the Science Faculty's most distinguished teaching

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Kerryn Dixon is a senior lecturer in the Foundation Studies Department at the Wits School of Education, South Africa. She holds a PhD in Early Literacy. Her research and teaching interests are in the field of language and literacy studies, Foucauldian theory and the application of spatial theories in education. She is the author of *Literacy Power and the Schooled Body* (2011) and co-author of *Doing Critical Literacy* (2014).

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Jacqueline Murray is Professor of History and Director of the First-Year Seminar Program at the University of Guelph, Canada. She holds a PhD in Medieval Studies from the University of Toronto, Canada. Her research has been recognised by a Canada Research Fellowship and grants from the Social Sciences and Humanities Research Council of Canada. Beginning her career at the University of Windsor, Canada, she subsequently joined the University of Guelph as Dean of Arts. She has focused on enhancing the first-year experience and learning outcomes through researching and teaching interdisciplinary first-year seminars. Her research has been disseminated nationally and internationally, and she is frequently invited to facilitate workshops on Enquiry-based Learning. Her contributions to teaching and learning have been recognised by numerous awards including the John Bell Award for Teaching Excellence and the D2L Innovation Award. In 2014, she was named a 3M National Teaching Fellow, Canada's highest recognition of teaching excellence.

Pamela Nichols came to South Africa in 1995, originally to the Wits English Department. Since 1998 she has been the Director of Wits Writing Centre, which is a resource for academic writing and for creative writers. Since its inception, the WWC has produced 17 award-winning fiction writers and part-organised six literary festivals as well as promoting successful academic writing and writing intensive teaching. She took her first degree at Sussex University, UK, taught and studied at the American University of Beirut, completed a teaching degree at the Institute of Education in London, before attending New York University, where she completed a doctorate in Comparative Literature guided by the work of, and personal engagement with, Edward Said. Her published work focuses on writing centres, writing intensive teaching, writing programmes, new African writing and strategies to enhance democracy through the development of citizen scholars. She is currently working on a book of creative non-fiction about Lebanon.

Milton Nomikoudis is a senior advisor, learning and teaching in the Office Dean Learning and Teaching (ODLT) at RMIT University in Melbourne, Australia. He has extensive experience as a teacher,

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Antje Schuhmann holds an MA in American Cultural History, Literature Theory, Social Psychology and a PhD in Postcolonial Studies. She has been working at the America Institute of the Ludwigs-Maximilian's University (Munich), the University of Bremen, Germany, University Paris 7, France, and the University of Orleans, USA. Currently, she is based at the University of the Witwatersrand in the Political Studies Department and in the Centre for Diversity Studies. The intersections of power with body politics and historic legacies within today's systems of violence and domination are one of the main foci of her intellectual and political work. Her transdisciplinary scholarly background is in US-American interpretations of French poststructuralist theory production especially in relation to gender and queer studies, critical race theory and postcolonial studies. Inspired by scholars of Critical Theory, she uses psychoanalytic concepts for the interpretation of socio-political and cultural phenomena. She has coedited *Blackness and Sexualities* (2008) and *Gaze Regimes: Film and Feminism in Africa* (2015), has published widely internationally and has produced film/audio features. She is active in international feminist, anti-racist/fascist networks.

Matthew Starr is originally from Far North Queensland. His mother's family are from the Torres Strait and his father's family are Scottish and Irish. He moved to Melbourne to take up a position as a senior

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Acronyms

ASD	Autism Spectrum Disorders
CEW	Critical Engagement through Writing
CHE	Council on Higher Education
CSI	Crime Scene Investigation
DHET	Department of Higher Education & Training (South Africa)
DNA	Deoxyribonucleic acid
EBL	Enquiry-based learning
EFA	Education For All
EL	Experiential learning
ENLACES	Latin American and Caribbean Higher Education Area (Espacio de Encuentro Latinoamericano y Caribeño de Educación Superior)
IR	International Relations
ITE	Initial Teacher Education
MCQ	Multiple Choice Quiz
MDGs	Millennium Development Goals
MOOCs	Massive open, online courses
NGO	Non-governmental organisation
OMIM	Online Mendelian Inheritance in Man
P4C	Philosophy for Children
PBL	Problem-Based Learning
PCK	Pedagogical Content Knowledge
SDGs	Sustainable Development Goals
TTP	Targeting Talent Programme
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States of America
Wits	University of the Witwatersrand
WWC	Wits Writing Centre

Introduction

James Arvanitakis and David J. Hornsby

In October 2014, a group of university educators came together for a workshop that sought to consider the future of higher education. Unlike other similar types of gatherings, ours focused squarely on how our teaching and learning environments address societal needs, now and into the future. Within the group, there was unanimous agreement that our higher education environments are no longer preparing our students to meet the needs of society and that we have to reorient our pedagogical practices or face universities becoming redundant.

As this book highlights again and again, this is not a new observation.

Rather than simply identifying the problem, the aim of the book is to highlight how the role of higher education must change in order to continue to remain relevant now and into the future. This is an aim we achieve by both establishing a theoretical argument and showing how innovative educators have confronted this challenge.

To 'future-proof' higher education, we propose that we turn to fostering a new type of student. A student who cares not only about gaining information and generating knowledge but one that is rooted in the reality of their context, problem oriented and interested in applying their knowledge for the betterment of a society: a student who is a Citizen Scholar.

The book is structured first by presenting the conceptual linchpin for reorienting our pedagogical approaches in universities in support of the Citizen Scholar, followed by a consideration of specific types of institutional and curriculum-wide interventions taken, and a series of discipline-specific case studies that discuss innovations and best practice. While all chapters explicitly discuss how the Citizen Scholar is fostered, each one offers different perspectives based on contextual insights. For example, disciplines in the Humanities, Social Sciences,

Sciences, Medicine and Education are represented; experiences at the undergraduate and graduate levels are discussed; common challenges in our learning environments such as the effects of massification, student diversity and student preparedness are explored, and insights from South Africa, Canada and Australia around pedagogical innovations in support of the Citizen Scholar bring a cross jurisdictional and developmental relevance to what is discussed.

In essence, the book covers a broad cross section of contexts to highlight that pedagogical innovations in support of the Citizen Scholar are possible regardless of the higher education environment.

As such, the contribution of the book is clear: it sets the conceptual frame by which we can rethink the role of universities and how they prepare individuals to contribute to the betterment of society now and into the future; we present particular proficiencies and attributes that, we think, should comprise the Citizen Scholar; we offer insights from across three different continents and under distinctive developmental contexts; and, we guide readers on how to do this, spanning a cross section of disciplines through insights into various innovative pedagogical practices.

In the first chapter, Arvanitakis and Hornsby consider the future of higher education and outline why our pedagogical practices in university must change. Grounding their views in Gramscian ideas of intellectuals and Frierian pedagogical aspirations, the authors introduce the idea that our pedagogical stances should be focused on getting students to be Citizen Scholars. They define the concept of the Citizen Scholar through proposing a set of proficiencies and attributes that will assist students in adapting to the evolving needs of society.

Armstrong and Summerlee agree that universities have to transform in order to stay relevant. They explore three different ways that have been promoted to engage learners in terms of effectiveness in outcomes and costs and just how they foster the Citizen Scholar. Although there is an apparent cost-attractiveness of massive, open-access, online courses or MOOCs, there is little evidence that MOOCs are effective at fostering authentic learning. In contrast, while enquiry-based learning is expensive, in resource terms, the impact on learning and fostering critical skill development outweighs the upfront costs and better prepares students to face the uncertain world ahead.

Murray builds off Armstrong and Summerlee by discussing how enquiry-based learning can be implemented and its effects. Murray argues that traditional education is proving to be wholly inadequate to develop the kind of Citizen Scholar that is critical to accommodate to

the fast-changing and complexity of the world that we inhabit. New programmes that focus on learning outcomes are critically needed. Murray highlights how an intervention at the first year can result in incredible change. The First-Year Seminars at the University of Guelph shows that students in these seminars learn how to learn, which, in turn, improves their academic performance and commitment to the institution and to society at large.

Kourtis and Arvanitakis offer insight into a different sort of intervention from the Guelph experience, that works towards the Citizen Scholar starting from the first year and going throughout a student's degree. Through establishing The Academy programme at the University of Western Sydney (now Western Sydney University), the authors discuss how they have sought to future-proof the education experience of students by delivering academic subjects, professional development and community engagement opportunities. Inspired by Antonio Gramsci's 'organic intellectual', The Academy is based on three broad philosophies: a future focus, interdisciplinarity and ethical leadership.

Following these broad approaches that have been implemented, we then turn to a series of case studies. Nomikoudis and Starr are the first course-specific case study discussed and tackle the Citizen Scholar attribute of 'cultural humility' in university learning environments. Here the authors argue that lecturers must seek to facilitate culturally appropriate learning for their students, so that they may develop effective tools for ethical and sensitive communication in diverse and constantly evolving professional settings. Cultural humility is discussed in light of the teaching experiences with Aboriginal Australians. The authors argue that to effectively integrate this attribute, a commitment to self-evaluation and replacing inherent hierarchical power imbalances of the university–student and teacher–student relationships with a collaborative learning model is required.

Dixon and Mendelowitz follow on providing a case from South Africa where students come to university from a variety of different cultural and linguistic backgrounds. Often, English is not a first language and students experience challenges when entering an English academic setting. The chapter details the adaptation of a first-year sociolinguistics course to assist 'pre-service student teachers' who cross linguistic and cultural boundaries between home, school and university. Using examples from students' writing, the authors show the ways in which student's critically explored issues of language and gender, language and class, language and space, language and power and language as an embodied practice. Clearly developing student understandings

of power in language and class are important to fostering the Citizen Scholar.

Indeed, understanding the relationship between power and communication is an inherent component of the Citizen Scholar. Nichols builds on this idea by exploring writing and how open-ended dialogue is necessary when teaching students to write. Through rooting the analysis in a case study of the Targeting Talent Programme at the University of the Witwatersrand in Johannesburg, the chapter argues that open-ended dialogue is necessary to enhance student engagement and that it is vital to a pedagogy that seeks to develop the Citizen Scholar.

Student engagement is a critical aspect of the Citizen Scholar. Hornsby and Ala explore how to pursue student engagement in a context where achieving such is difficult: large classes. The authors argue that rooting disciplinary content in practical contexts is a critical way to mitigate the deleterious effects of large classes and give evidence from experience in their introduction to International Relations course. Through employing a variable approach to teaching and assessment, the authors show us that even in light of large classes, fostering a Citizen Scholar where students are connected, engaged and thinking critically about events going on around them is possible.

Reed considers another facet of massification: that is, coping with the diversity in the type of student in our classrooms. By discussing the efforts at Ryerson University to implement a Universal Design model for non-traditional students, Reed shows us how accounting for, accepting and promoting student diversity in the classroom can contribute to inculcating the proficiencies and attributes necessary for the Citizen Scholar, despite the challenges posed by massification. In this chapter, three groups of non-traditional students are highlighted in terms of their educational backgrounds, their reasons for attending university, factors that maximize their success at university and teaching methods that best assist them in reaching their educational goals.

Brenner unpacks her strategies for encouraging *critical thinking* in a large first-year biology class. The chapter argues that students often arrive at university with rote learning skills, accepting facts and unable to think critically. Brenner argues that it is necessary to change this and outlines some of the strategies that include writing interventions and use of technology. Also discussed are practical ways to create safe spaces for debate and dispute, how to link scientific knowledge with everyday experiences and the use of inquiry and other assignments, as well as engagement with assessment feedback, to promote *critical thinking*.

Lind shifts our focus to medicine, arguing that we need to ensure that our students have proficiencies beyond discipline-specific knowledge and that educators can take an active role in ensuring that these proficiencies are met. By working through her own experiences, Lind focuses on how to best structure different aspects of our learning environments such as focusing on developing study skills, variable teaching strategies to help revitalise practical components, the position of lectures in reinforcing the importance of scaffolded learning and the infusion of multimedia to increase the relevance content being taught. The final section of her chapter focuses on lessons we can learn from student feedback and how the attributes that students identify as important in their educators can help us questions our own teaching style to encourage student learning and improve students' skills and attributes.

Coming from a public health perspective, Fonn identifies two challenges that face educators in the twenty-first century: student diversity and complexity. These are both prescient matters which require lecturers to think around how they communicate and how to accommodate interdisciplinarity. To address these challenges, Fonn suggests that simulation games can offer one approach in response and help build the Citizen Scholar. By developing a simulation game aimed at medical students, understanding of the relationship between epidemiology, health economics, health outcomes, policy and population health is developed. The chapter concludes with an assessment of this pedagogical strategy and how it can offer significant disciplinary breadth and depth.

Schumann offers a perspective on pedagogy as a mechanism for social justice. By arguing that lecturers need to stop being focused on filling students with encyclopaedic knowledge as if they are empty vessels, this chapter explores how lecturers and students can work together to share experiences, tools for analysis and knowledge. Such an approach challenges traditional learning environments and suggest that a key way to foster the Citizen Scholar is through a more reflexive learning environment where the experiences and understandings of students are considered as equal to those of the lecturer. Through six case descriptions, the author offers her experiences in a graduate learning environment

Duncan considers the role of peer mentorship in cultivating the Citizen Scholar. Often university educators do not consider the role of graduate tutors or teaching assistants when constructing their learning environment. Duncan challenges us to use these valuable and common elements of our learning spaces towards instilling the qualities of the Citizen Scholar in our students. The chapter draws on empirical findings

from a pilot project conducted in the Wits School of Arts in South Africa and offers deep insight into how higher education can disrupt traditional power, knowledge and authority structures.

Giorza turns our attention to how fostering the Citizen Scholar in teacher education degree programmes can play an important role in addressing change, diversity and inequality. Giorza contends that to prepare future teachers for their careers, higher education needs to focus on instilling particular attributes such as flexibility, resilience, openness to change and diversity, and a readiness to learn new things and to be prepared to cross over and break down disciplinary boundaries. This chapter describes an intervention offered to beginner teachers in South Africa and unpacks a pedagogy that offers powerful possibilities for generating new cohorts of Citizen Scholars at different levels of the education strata.

In the final chapter of this book, Maodzwa-Taruvinga also reflects up how teacher education programmes should be reoriented in support of developing Citizen Scholars. The chapter proposes the conceptualisation of critical thinking as pedagogy and provides a reflective analysis of how two different pedagogical approaches can be re-imagined to develop the proficiencies and attributes necessary for the Citizen Scholar. Inherent in the approach offered by Maodzwa-Taruvinga is how teacher education programmes in African universities can be oriented towards supporting a socially just development agenda.

The insights into this book offer a perspective into how we might ensure the continued relevance of university education. We do not propose to solve all problems facing higher education in these pages, rather we seek to offer a way forward, based on strategies and initiatives undertaken, to ensure that our learning environments prepare our students for the world ahead. A world that is ever changing and evolving, that requires a flexibility in thinking and a capacity to problem solve; that needs a citizen who cares about others and the betterment of society.

1
Are Universities Redundant?

James Arvanitakis and David J. Hornsby

Modern higher education is faced with a common problem regardless of location and developmental contexts: How do we educate students in a time of disruption?

This is a disruption that is occurring at every level – societal, cultural, economic and environmental – and is echoed within institutions of higher education through rapid changes in tuition, enrolment, diversity of student populations and medium of instruction (Christensen et al., 2003). The context in which learning occurs is rapidly changing and we, as educators and those interested in the place and position of higher education, must wrap our minds around just how we adapt and respond.

For example, how do we deal with the fact that a graduate today enters what is described as the 'four-year career' (Kamenetz, 2012)? Indeed, graduates today may end up with something like seven to nine careers in their lifetime. That is not seven to nine jobs, but actually career changes. Even for those remaining within the same industry, statistics show that the number of people in the United States aged 25–64 who held the same job for more than ten years fell from 51% in 1980 to 39% in 2005. Today, we can think of living in a world inhabited by what has been described as 'Generation Flux' (Safian, 2012).

How, then, do educators prepare students for such an environment?

The truth is that traditionally we do not do very well at it. Universities are 1,000-year-old institutions based on distinct disciplines that students select before they enter and often continue on a journey of specialisation until they graduate. While the world has changed drastically over the last few decades requiring multi-disciplinary and modal thinking, the vast majority of universities tend to maintain a philosophy of education similar to that at the turn of the twentieth century: delivery of disciplinary-based content.

Certainly, we have seen some innovations and improvements – the emergence of the flipped classroom; new technologies introduced both within the classroom and beyond and the emergence of experiential and service-based learning. These innovations tend to be the focus of certain staff in some disciplines, and only a handful of experimental institutions across the sector have yet been able to make the transition.

More concerning, though, is that we have not witnessed a shift in the way that universities approach education: we still see many colleagues focusing on the delivery of disciplinary-based content. This content is based on knowledge that is delivered in a building block approach in which disciplinary gatekeepers make decisions on what is to be taught, what is to be ignored and how it will be assessed.

Those of us who have tried to implement innovative pedagogical approaches or to rethink our pedagogical environment consistently confront challenges. Even when senior management and engaged staff are both eager and willing to see change happen, the disciplinary barriers built over the generations have made structural innovation near impossible.

If universities cannot keep up with the ongoing change of the contemporary world, then we must ask the most disturbing of questions: Are universities now redundant?

Like newspapers and record labels, universities used to both produce and own content. Such organisations held a revered place in society, and the information produced was seen to shape the world: newspaper editors decided what was newsworthy; record label executives decided who was going to be the next 'big thing'; and universities were the primary source of post-secondary education. Not only did institutions of higher education produce knowledge, but they were also responsible for distributing it through the traditional delivery mechanisms of books and expensive academic journals.

In short, universities used to control content.

Today, like newspapers and record labels, universities and educators must accept that we are no longer the primary manufacturers and distributors of content: we compete with other content producers for both the attention of the public and the ear of decision-makers. These include private corporations, religious organisations, media outlets, bloggers and online forums such as Wikipedia – in fact, it includes almost anyone who is connected to the Internet.

Some of these organisations make valuable contributions that add to the level of public debate and accountability. In Australia, for example, the active citizen organisation 'GetUp!', based on the US group 'MoveOn', raises questions that rally hundreds of thousands of

Australians on issues from the need to respond to climate change, to religious tolerance and the fair treatment of refugees. Similarly, in South Africa, the 'Right2Know' Campaign, through mass mobilisation, has successfully challenged government plans to extend secrecy and curb media freedom. In Canada, the 'Me to We' organisation seeks to promote a generation of socially aware and conscious individuals interested in development.

While we see 'GetUp!', 'Right2Know' and 'Me to We' collaborating with a cross section of highly reputable academics to distribute high-quality information regarding a whole range of social, economic and environment issues, we see similar 'public interest' organisations such as the Institute of Public Affairs in Australia, the Fraser Institute in Canada and oil and petroleum interests in South Africa assist in the distribution of highly questionable research findings (Moran, 2010; Olver, 2013; McKitrick, 2014). In all three countries, there are shock jocks spreading misinformation, and, in some instances, misogyny and Islamaphobia over public airwaves.

The research from private organisations can be powerful and insightful, as well as misleading and destructive. Special interest groups and a globalised media compete for the attention of consumers who produce knowledge themselves. Love it or hate it, Wikipedia remains one of the most consulted and referenced sources.

Just as challenging is the idea that we as lecturers must also compete for the attention of our students. We are not just describing the distractions that technologies provide – students have always found ways to be distracted – like doodling or passing notes to each other – but we as university educators need to realise that in order to achieve student commitment to deep learning we have to engage and secure their attention.

If universities do not adapt to this changing world and acknowledge their own failings, the chances are that they will become redundant, very quickly.

This was the challenge that the authors in this volume gathered to confront, and one that we understand has no simple answer.

Education, Malcolm X once said, 'is the passport to the future, for tomorrow belongs to those who prepare for it today'. While this is a powerful quote, it is also somewhat limiting because it falls short for two reasons. First, education is not just about preparing today, but doing it in a way that makes us think about the contours of tomorrow as well as understanding how we can help shape those contours. Second, education that is based on the way we currently do things will only replicate what we now know, and this is not good enough. If we are to

prepare university graduates for a changing world, then we have to do things differently.

To reinforce this, consider just how quickly the world is changing. Twenty years ago a 'mobile' was a toy that dangled from a cot; ten years ago, Facebook was only for a handful of students in the United States; five years ago, the words *cloud* and *computing* had never appeared adjacent to each other – well not in popular discourse anyway – and a 'tablet' was for headaches. Today, smart phones provide access to the libraries of the world and a myriad of apps mean to make accessing information easy and quick – a technology that seemed fantastical five years ago.

So, how do we educate in a world that changes so very quickly?

Sir Kenneth Robinson, a high-profile education reformer, argues that educational institutions prepare students for opportunities that have ceased to exist. This is not only in the content but in the style of teaching: we produce graduates who are preparing for a world where opportunities were location specific, people had a single career in a lifetime and the life journey of an employee followed a clear process with a predictable goal.

Such a world no longer exists: today's university graduates will have multiple careers, the world in which they work and in which they live may be on different continents and are required to be entrepreneurial or even 'intrepreneurial', that is, entrepreneurs within their own employment environment. In response, there is a need to revisit and redefine what graduates take away from their university experience.

The question is, are universities preparing students for this world? The answer is, in most cases, no!

Jay Elliot (2012), who worked closely with Steve Jobs in the leadership team of Apple Computer Inc., in his recent book *Leading Apple with Steve Jobs*, quotes Steve's vision of innovation:

> Innovation comes from people meeting up in the hallways or calling each other at 10:30 at night with a new idea, or because they realized something that shoots holes in how we have been thinking about the problem. It's ad hoc meetings of six people called by someone who thinks he has figured out the coolest new thing ever and who wants to know what other people think of his idea.

In terms of what students should be taking from the university experience, Job's vision indicates that there are some additional essential characteristics, in addition to the disciplinary knowledge and expertise.

So what is the answer?

In this book, we argue that universities, to remain relevant and meet the needs of our societies and economies, need to redefine their roles. We can no longer simply rely on producing research papers and educating students about the 'truth'.

'Climate change' provides a relevant yet disturbing example: no matter how many refereed scientific papers are produced confirming that human-induced climate change is real and happening, as we write these words, with destructive impacts, there is enough misinformation produced that the general public feels that the science is still uncertain.

The traditional response has been to rely on teaching 'the facts'. This is the belief that if we explain clearly what the research shows, students will understand.

Facts are undoubtedly important, but the challenge is to arm students not with just knowledge, but skills and proficiencies that allow them to deal with the many changes described above. Included here is the challenge of dealing with information abundance: how do we teach students to decipher the millions of hits they find on a Google search? And, this is only going to become more challenging: IBM, for example, estimates that 90% of all data has been created in the last two years.

Future-proofing higher education: The Citizen Scholar

A key argument in this book is that because of the ongoing structural changes driven by global and technological advancements, we need to future-proof higher education by looking beyond the provision of content alone and focusing on a new set of 'Graduate Proficiencies' for the century ahead. The Citizen Scholar encapsulates the idea that the role of universities is to promote both scholarship and active and engaged citizens. That is, universities need to inculcate a set of skills and cultural practices that educate students beyond their disciplinary knowledge. This arguably pushes the debate beyond the simple transfer of skills, as part of the activities and academic development necessary to complete a degree. Rather it takes on a broader, more societal focus.

Such thinking comes from the idea that universities maintain a social mission that mobilises knowledge for the benefit of society. That is, we believe that a central purpose of higher education is to improve the societies in which we live and foster citizens who can think outside of the box and innovate with the purpose of community betterment. Indeed, Martin Luther King Jr, said it best: 'Life's most persistent and urgent question is, "What are you doing for others?" '

Further, we mobilise the Citizen Scholar concept as a means of integrating aspirations of social change into higher education pedagogical development. It is well established that pursuing university studies can play a role in addressing inequalities in society because graduates tend to be more healthy and lead prosperous lives. The pursuit of a university degree can help to rectify structural injustices where certain groups are more privileged over others (Bloom et al., 2005; OECD, 2008). But these facts only stand if we develop curricula and pedagogical stances that prepare students to participate in the economy, that challenge them to apply the knowledge they have gained to innovate and make them aware and interested in understanding the societal structure in which they live. By developing curricula or teaching that narrowly focuses on the content of our disciplines, we only enhance disciplinary knowledge and reinforce disciplinary boundaries. This inertia means that we fail to inculcate the vital significance of breadth of understanding across disciplines and the importance of appreciating meaning and gaining not only knowledge but also cultivating wisdom. By advocating learning environments that place new Graduate Proficiencies that have at their core particular skills and cultural practices, we are suggesting that higher education will be future-proofed.

Inspiration for the Citizen Scholar is derived from Gramscian views on education and intellectuals and Freirean pedagogical aspirations (something that Kourtis and Arvanitakis discuss in detail later in this collection). Antonio Gramsci posited that education must be about promoting social change and challenging traditional power relations. As such, he argued that a true intellectual was someone who facilitated social change through pragmatic, problem-oriented and culturally relevant expression of ideas, feelings and experiences of the masses. Unlike modern day interpretations of the term 'intellectual' which suggest elitism and reinforce social hierarchies, Gramsci (1971: 10) believed that anyone could be an intellectual because we all carry

> some form of intellectual activity ..., [and] participate in a particular conception of the world, [have] a conscious line of moral conduct, and therefore contribute to sustain a conception of the world or to modify it, that is, to bring into being new modes of thought.

In this vein, Gramsci believed that the process of education was not about being ethereal, disconnected and capable of making grand speeches but rather was rooted in 'practical life' (Gramsci 1971: 10).

The position of universities does not figure prominently in Gramsci's work but is rather implied as the institutions of education and spaces where intellectuals congregate. We extend Gramsci's analysis and suggest that, indeed, universities are integral spaces to pursue an overarching mission for social change because they are inherently engaged in communities and mobilise new sets of thinking.

However, modern universities often reproduce existing power relations, particularly under current models of differentiated fee payments and decreasing public funding for higher education. Furthermore, our content-driven, discipline-specific learning environments do not encourage a pedagogy that fosters creative thinking or even societal action (Freire, 1970).

As Kourtis and Arvanitakis note, Gramsci raised concerns that the education system was disconnected, theoretical and irrelevant to everyday lived experience, resulting in passivity amongst students rather than active engagement in societal problems (1971: 35). In *Pedagogy of the Oppressed*, Paulo Freire (1970) echoes Gramsci's concerns linking the role of education and how we teach to the persistence of inequality in societies. Freire (1970) developed his ideas in the context of Brazil, an appropriate place in which to situate a discussion of societal inequality but not exclusively. Societal inequality is on the rise worldwide; the gap between the rich and poor is increasing despite more than half a century of explicit economic policies that sought to counter it (Wolf, 2015).

Freire's (1970) vision of a pedagogy that is rooted in the lived experience of the masses is increasingly relevant. Freire argues that we need to confront inequality through inspiring students to question, challenge and agitate around existing power structures. Freire believed that education was about addressing the needs of the masses and to teach them to make a better society by addressing inequality. But what is additionally inspirational, and reinforces of our vision for the Citizen Scholar, is how Freire identifies that the way we teach needs to connect with problems surrounding us and who we teach needs to be diverse:

> No pedagogy which is truly liberating can remain distant from the oppressed by treating them as unfortunates and by presenting for their emulation models from among the oppressors. The oppressed must be their own example in the struggle for their redemption.
>
> (Freire, 1970: 54)

Taking Gramsci (1971) and Freire (1970) seriously, we suggest that our learning environments require a pedagogical stance that integrates a

sense of moral and ethical purpose to learning; that actively integrates cultural pluralism in developing knowledge and understanding that aspires to liberate the learner from existing power structures by fostering a desire to challenge and change the social system in which we live; and that connects the reality around us and its many problems to the knowledge generation process.

As established academics and researchers, many of us already do this in our intellectual projects. We tend to be problem-oriented and push for change in our research. We seek to challenge existing power structures and influence how society is shaped. We do not treat knowledge as uniform, appreciating that context is important and we take evidence seriously in the knowledge generation process. So, why does it seem that we disconnect from this in our learning environments? Why is it apparent that the dominant pedagogical model is focused on disciplinary content transfer? Why do we privilege lecture spaces in which individuals stand up at the front and speak at, rather than with, students?

Such a context has to be challenged and radically changed: we must expect more from our learning environments. To do this, we suggest a pedagogical stance that moves us towards a practice that fosters Citizen Scholars of our students.

Each of the educators contributing to this book believes in the social mission of higher education that we have outlined above. They adhere to these ideas and are best described as innovators who seek to confront challenges and activate students to be socially minded and capable of contributing to community betterment. In putting this book together, we challenged them not only to outline their innovative approaches but to outline *why* they have introduced these innovations: that is, what proficiencies and attributes do they desire for the students to gain from these innovations?

We have identified a cross section of proficiencies and attributes that we argue are essential for preparing our students for the challenges of tomorrow. Figure 1.1 outlines a set of proficiencies and attributes inherent in the Citizen Scholar, which we believe will lead to an active individual who is engaged not only in the process of learning but also in their society.

We have constructed a figure using a 'chaos approach' as we want to emphasise that these are not presented in any particular order and are interrelated. Moreover, we have identified four overarching 'Proficiency Clusters' that assist in categorising particular proficiencies for conceptual clarity. We will briefly describe them here, but it is
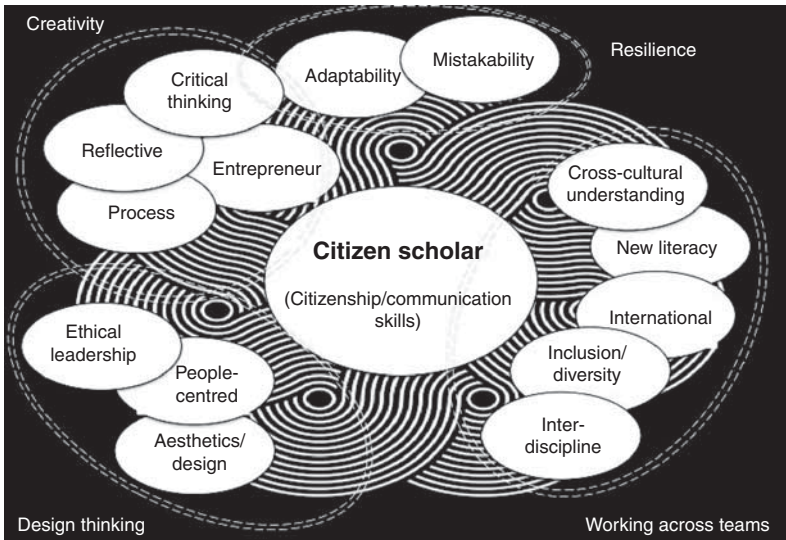
Figure 1.1   Proficiencies and attributes of the citizen scholar

important to recognise that in reality the clusters are often fuzzy and overlapping.

Proficiency cluster 1: Creativity and innovation

Creativity and innovation should certainly hold a central place in universities although this is not always the case. Both these dimensions are integral to generating new and unique ideas. It seems readily accepted that creativity and innovation are required for research, but they should also be equally held paramount in our learning environments. Indeed, focusing on fostering creative and innovate thinking in the classroom results in a learning space that is free and enabling of all involved to contribute different, interesting and unexpected information.

We argue that creative and innovative attributes, such as critical thinking, problem solving, reflection, entrepreneurship (resourcefulness), systems thinking and understanding the importance of process rather than just content, need to be at the core of our learning outcomes and curriculum.

Whilst such a proficiency cluster may seem obvious, recent studies have suggested that attributes such as creativity and innovation are on the decline across society. Kim (2011), in a study utilising an established test for measuring creative thinking – the Torrance Test – has shown that

children and adults in the United States are displaying trends towards conformism and providing the expected answers rather than coming up with innovative ideas. Kim (2011) goes on to suggest that standardised curriculum, rote memorisation and national testing are to blame for such a context.

Specific attributes

- *Critical thinking* – often defined as clear and reasoned thinking, this concept also includes challenging perceptions and conceptions through the application of novel or different ideas;
- *Problem-solving* – oriented towards finding solutions to problems through innovative thinking;
- *Reflexivity* – a student reflects on the information provided and considers alternative ways to address;
- *Entrepreneurship* – a student is able to start the innovation and creativity process with minimal resources and rapidly develop, fail fast and learn from mistakes before moving ahead again;
- *Being process-driven* – students focus more on the process associated with a problem as a means to consider ways of solving it rather than purely on the content of the problem; and,
- *Systems thinking* – students think about how different elements influence each other or are related by breaking down component parts of a system.

Proficiency cluster 2: Resilience

Resilience is an integral aspect of the Citizen Scholar. Here we mean resilience in the sense of a capacity of students to adapt, be nimble and flexible to change, adopt and even anticipate innovations, maintain a real capacity to learn from mistakes and to persevere. Indeed, learning is at its most pure when we make mistakes. We often do not recognise resilience as a necessary attribute for our graduates to maintain, believing that it is an inherent trait. But, like other attributes, we argue that resilience can be learned through practice, from making mistakes and being required to try things again.

Duckworth (2013) argues that grit (resilience in the face of failure) can be an important attribute when thinking about how students succeed. Eskreis-Winkler et al. (2014) argue that military recruits at the US military college, West Point, are more likely to stay within the summer training programme if they maintain a high level of grit or resilience, debunking traditional views that intelligence or physical aptitude were telling indicators. While this focuses more on a trait that may appear

to be more inherent in the soldiers, it also suggests that resilience, as an attribute, is important to future success and that educators need to think about how to foster resilience in university learning environments.

Specific attributes

- *Adaptability*: When a student is nimble and flexible, capable of adopting and anticipating change and innovation; and,
- *Mistakability/Perseverance*: Learning from and taking advantage of mistakes and errors;

Proficiency cluster 3: Working across teams and across experiences

Teamwork is an essential and normal activity in today's business world, but such approaches are often eschewed in university environments which privilege learning as an individualistic endeavour. However, teamwork is important to innovation and the advancement of ideas. Indeed, the notion that ideas are generated in a vacuum seems almost preposterous; yet, in higher education environments, we remain rooted in an individualistic approach to learning, often penalising students who collaborate with each other. We need to break this mould and recognise that by foster students working together, we are assisting them to develop an important attribute associated with innovation. In this sense, we need to create a culture where individual and collective success are synonymous.

Equally important is the need to recognise and accommodate the growing interconnectedness of our societies. The massification of education has brought with it increasing access to groups previously excluded from higher education (Arvanitakis, 2014). Additionally, our classrooms are becoming inherently more international with students from abroad or exchange programmes becoming more commonplace. This means that our learning environments need to be more attuned to fostering students' ability to work across diverse experiences because the demographic make-up of universities is dramatically different to ten or even five years ago.

When considering specific attributes that would achieve such a proficiency, interdisciplinarity, cross-cultural understanding, new literacies, internationalisation and inclusivity all come to mind.

Specific attributes

- *Interdisciplinarity* – an ability to think across disciplines in pursuit of more holistic problem-solving;

- *Cross-cultural understanding* or *cultural humility* – an ability to appreciate that different cultures may bring different ideas and thinking on how to advance understanding;
- *Developing new literacies* – not just strong reading, writing and advocacy skills, but understanding literacy within the new and changing technological environment;
- *Internationalisation* – promoting the ability to work in different cultural contexts; and
- *Inclusivity* – recognising that societies are diverse and with this comes different and unique ways of thinking that can be important in innovation.

Proficiency cluster 4: Design thinking

Design thinking ultimately places people at the centre of our decision-making. Those adopting this approach emphasise accounting for people's needs and desires as well as the relationships around them when solving problems. Inherent in design thinking is the need for aesthetics, that is, a pleasing environment. The desire for beauty and refinement is part and parcel of our working and social lives. Just think of the last time we purchased something that was functional but ugly: from a mobile phone to cars, from our work environments to our homes, aesthetics plays a role.

Ethical leadership is also an important element in design thinking which espouses an ethos of relationships between individuals rather than a hierarchy between employers and employees. Indeed, the way educators treat students is indicative of leadership, and we argue that it is important to remove the hierarchical dynamic of the past and make way for a more symbiotic relationship between members of university communities. This is linked to the earlier idea about the relationship between lecturers and students no longer being limited and unidirectional, but rather is becoming a dynamic exchange where each bring their own experiences to bear on the information.

Specific attributes

- *People-centred thinking* – placing people and their needs at the centre of our work;
- *Aesthetics* – appreciating the importance of both functionality and beauty (Satell, 2014); and
- *Ethical leadership* – building a frame of reference in which to reflect on moral and confronting challenges and understanding that leadership is a process not a hierarchy.

To achieve this broad goal of the Citizen Scholar, we argue, we need to adopt three broad principles:

1. Uncertainty is acceptable;
2. Silos must be broken and interdisciplinary learning promoted; and,
3. Learning best occurs through an exchange of ideas in a non-hierarchical environment.

We do not know what the next decade holds, but what we do know is that the past in no longer a guide for what is likely to be the future.

The ultimate aim of this book is to future-proof education by encouraging a change in how we teach. In the pages that follow, a series of programmes and approaches are outlined that are not only innovative but promote the proficiencies and attributes described in this chapter. These experiences show – from across a range of disciplines and societal contexts – that it is possible to re-think the way we approach higher education. To suggest anything less means we will be failing not only our current students, but future generations also.

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2
In Search of the Citizen Scholar: Modern Pedagogical Approaches Compared

Gavin R. Armstrong and Alastair J.S. Summerlee

Introduction

Learning should be a magical experience: it should be a journey of epic proportions and like all good epics it should be challenging, emotionally draining and fun. It should be mentally and physically tough, full of unexpected twists and turns interspersed with moments of wonder. It should also be frustrating, demoralising and captivating. This kind of journey will not only instil in learners a love of learning but will equip them with the skills for the workplace in the future.

Most tertiary education establishments, however, have lost their way. In response to the tightening noose of fiscal restraint, universities have mistakenly bought in the false premise that teaching is a surrogate for learning, and have adopted pedestrian teaching paradigms to improve the 'efficiency' of that process without regard to whether or not they are instilling the crucial skills learners need. Universities have become obsessed with providing information rather than fostering the love of learning which is actually the key to flexibility and adaptability.

Paradoxically, the advent of the Internet has compounded this problem. For many, the Internet is seen as a tool to improve the effectiveness of providing more information on a larger scale. Meanwhile, the advent of social media has changed the way students engage with information and with each other. Society is demanding development of critical skills such as resilience; creativity, design thinking and an ability to work across teams.

This chapter seeks to analyse the effectiveness of three potential solutions to the above challenges and set them in the context of the modern university education.

An historical perspective

The purpose of university-level education has shifted over the past millennium. In medieval times, places of learning (mostly religious foundations) were the repositories of information and attracted a rarefied elite to engage with those sources (Rait, 1912; Altbach, 1999; Christensen-Hughes & Mighty, 2010; Summerlee and Christensen-Hughes, 2010). Institutions provided the training grounds for intellectuals in theology, law and later medicine. These bastions effectively controlled philosophical thought and supervised ethical debate. Their modus operandi was determined by the paucity of the written word. Literally, the elder religious figures read from the venerable texts to the noviciates, and the concept of the lecture was born.

As a result of the industrial revolution, the point and purpose of universities started to change: access to information became vital for innovation and there was an urgent need to expand both the scope and the scale of the number of individuals trained to think. This change was pioneered in Germany, where the concept of nation building was enshrined in research and higher-level education (Altbach, 1999). The idea spread to other parts of the world but a dichotomy between teaching-focused undergraduate and research and graduate education began to emerge. The concept of compartmentalization fitted perfectly with the concept of commodification that was at the heart of the industrial revolution (Robinson, 2006, 2010). Just like the widgets in a factory, the prevailing thought was that learning could be broken down into fragments that could be assembled into a final product. The concept of the lecture (the efficient delivery of those components) remained paramount in a supposedly orderly learning process.

The next revolution in higher education came with at the end of the Second World War. In an attempt to reintegrate servicemen and women into the workforce, there was a push in the United States to increase access to higher education (Cuban, 1999). At the same time, the American government made enormous investments in research budgets, and the gap between educating large number of students and the demand to expand research capacity began to be widen. From today's vantage point, the separation from teaching and research is difficult to rationalise because fundamentally the process of learning should be the process of discovery that is at the heart of research methodology.

Universities, faced with the increasing pressure to educate more students, continued to see the lecture as the 'most efficient' way to impart information. The lecture was the orderly presentation of information

that the lecturer constructed for the learner. However, as the trend towards the massification of university education (Altback et al., 2009) continued, evidence began to surface that the lecture was an inefficient tool for effective learning (Gibbs, 1981). Pioneering work on the approaches to learning carried out by Marton and Säljö (1976a, 1976b) showed that students tended to adopt one of two learning strategies when faced with a new body of information. One group set out to learn the facts in the novel piece, while the other tried to comprehend and understand the meaning of the information: students who concentrated on learning the facts were labelled superficial or surface learners because the information they garnered was limited primarily to repetition (regurgitation) of the same nuggets of information, while those who tried understand the meaning of the information, were able to recall and use the information were referred to as deep or authentic learners (Marton and Säljö, 1976a, 1976b).

The concept of deep learning is also embedded in the language used of the study of neural networks in machine learning – depicting the process whereby abstract concepts of varying complexity are represented herein (Schmidhuber, 2014). Initially, this definition seems to reflect precisely the process that learning in universities is seeking to instil: that is, through a series of exercises and experiences, universities are trying to create patterns of information that become embedded in the brain, can be more easily recognised and thereby retrieved.

On closer inspection, however, this definition is not sufficient. Universities are doing more than simply making the process of remembering facts more efficient. The objective is to create individuals who can not only accumulate information efficiently but also synthesise that information into new knowledge. Rote or superficial learning does have an important part in day-to-day activities, but higher education should be about developing higher-level skills.

It is critical to understand the drivers for deep learning if universities are to improve the learning processes. Biggs (1987) argues that deep learning is best characterised when the intent to learn, the individual and social orientations to learning and the ability to apply knowledge are evident. Essentially, this is a constructivist approach to the concept of learning. There are analogies from other disciplines. For example, in management literature, effective learning and behaviours in the work place are characterised by the social environment. In situations where employees experience authoritarian and hierarchical control, where they are constantly being told what to do, there is a sense of powerlessness and a lack of belief in self-efficacy (Conger and Kanungo,

1988). Conversely, removing conditions that incite that sense of powerlessness and replacing them with empowerment-inducing strategies profoundly affects the abilities of employees to engage and participate more meaningfully in the organisation. Conger and Kanungo (1988) argue that such empowerment requires attention in four dimensions: *enactive attainment* – the experience of mastering a task; *vicarious experience* – the experience of others successfully mastering a task; *verbal persuasion* – positive verbal encouragement and feedback; and a positive *emotional arousal state* – a supportive and positive environment.

There are parallels with these observations and the tenets of effective deep learning (Marton and Säljö, 1976a, 1976b) and with the observations from the role of engagement in authentic learning (Kuh, 2005; 2008). Pintrich (2003) also suggested that motivational constructs are vital for deep learning. His research showed that there are four dimensions where student performed better: *beliefs about control* – individuals who believe that they have greater personal control over their own learning; *intrinsic motivation* – students faced with personal situations or issues relevant and appealing to them; *value* – students who care about the task in hand or believe it is important; and *goals* – students understand the goals of the learning exercise. This led Pintrich (2003) to identify a number of design principles for renewed pedagogy. These include the following:

- feedback on expertise, mastery of process and reasoning skills;
- tasks that are challenging but can be managed;
- ability to exercise some choice and control;
- tasks that are personally meaningful, that is, relevant and interesting the learner;
- cooperative/collaborative group work; and,
- evaluation structures focused on process and not content.

The challenges facing universities of today

Fundamentally, a modern-day university has to balance a number of competing priorities: the need to educate larger numbers of students; the fiscal challenge of ever-tightening financial resources; the need to address the false dichotomy between teaching and research; and the need to engage students more effectively in their learning to create the most authentic learning experiences with outcomes focused on skill development. There have been a number of attempts to address the challenges in providing a modern, relevant education in universities.

This chapter explores three different approaches: (a) experiential learning (EL); (b) massive open, online courses (MOOCs); and (c) problem- or enquiry-based learning (EBL) and attempts to analyse the way they achieve or not the various models for effective deep learning and focus on skill development.

The principal challenges that confront this type of analysis are: the precise definition of the pedagogical innovation because there are often different manifestations of the pedagogical technique; the changing nature of the particular innovation because they are constantly evolving; and the assessment strategies used to compare the approaches. These will be referred to later in this chapter.

Experiential learning (EL)

Engagement, both inside and outside the classroom, is recognised as a vital and reinforcing component of a quality learning experience (Astin, 1993; Lewis and Williams, 1994; Kuh, 2001; Pascarella and Terenzini, 2005). EL comes in a variety of different approaches but is fundamentally divided into two main categories: field-based experiences and classroom-based learning experiences (Cantor, 1995; Chapman et al., 1995). Field-based learning is the oldest and most established form dating back the 1930s; examples include internships; practicums; cooperative education and service learning. In contrast, classroom-based experiences include role-playing; case studies, simulations; games and group presentations and activities.

Zubizarreta (2014) outlined seven components that must underpin successful design and implementation of EL experiences. These include the following:

- focus on relevance and intent of the exercise/activity;
- combination of activities to maintain interest;
- integration of the material from the experiential to the classroom learning;
- activities are challenging, demanding but achievable;
- clear expectations for the students;
- sufficient time for self-reflection about the activities; and,
- tasks that can be adapted (control) for the individual learner.

In essence, these requirements are similar to the four empowerment paradigms promoted by Conger and Kanungo (1988) and the design principles enunciated by Pintrich (2003) mentioned previously. Although there are challenges dissecting the effectiveness of learning

from the variables that might confound the analysis, such variables apply to the three different approaches to learning discussed in this chapter (Ewert and Sibthorp, 2009).

The critical challenges are both to separate perceived learning from genuine long-term learning and being able to document whether or not approaches to education actually foster students' growth and development and advance critical skill (Qualters, 2010). To this end, a number of different assessment tools have been designed ranging from reflection on specific and critical incidents during the learning experience to presentations and written material, to recommendations for improvement in the specific example of field-courses, interactive discussions with a directed focus and learning portfolios. Qualters (2010) asserts that learning portfolios provide the most comprehensive approach to assessing EL providing that they specifically document skill development.

As might be anticipated from the work by Kuh (2001) on engagement, completion rates and the performance of students taking EL courses are not only high but also have a positive impact on overall university completion rates (Astin, 1984; Jiusto and DiBiasio, 2006; Crosling et al., 2009). In fact, experiential courses specifically targeted at traditionally disadvantaged groups have shown that this type of engagement can quite dramatically change course and programme dropout rates (Dille and Mezack, 1991). In addition, EL activities, when appropriately designed, can promote specific skill development – see Table 2.1.

Massive open, online courses (MOOCs)

The concept of online courses can be traced back to the early part of the last century when correspondence courses were introduced (Saettler, 1968). Distance education offered the opportunity to obtain training, at a reasonable cost, using the postal service. Participants could complete course-work while remaining in the workplace (Casey, 2008). Despite attracting high enrolments, completion rates of these distance courses were less than 3% (Kett, 1994).

The advent of each new communication technology has been followed by a renewed claim that distance education could enhance learning. Such innovations include radio, television, video recorders, home computing, and most recently the Internet; despite this, completion rates remain low.

The Internet led to the emergence of a new model referred to as massive, open, online courses or MOOCs. First conceptualised in 2008 (Fini, 2009), the concept expanded rapidly with major universities offering these types of courses (Daniel, 2012; Pappano, 2014).

Table 2.1 A comparison of the effectiveness of three different approaches to enhancing learning skills crucial to tomorrow's graduate

	Experiential learning	MOOCs	Enquiry-based learning[#]
Creativity and innovation			
Critical thinking	(✓)*	(✓)	✓✓✓
Problem solving	✓	(✓)	✓✓✓
Reflexivity	✓*	(✓)	✓✓
Entrepreneurship	✓✓*	-	✓*
Process driven	✓	-	✓✓✓
Systems thinking	✓*	(✓)	✓
Resilience			
Adaptability	✓	✓	✓✓
Mistakability/perseverance	✓	✓	✓✓✓
Working in teams			
Interdisciplinarity	✓	✓*	✓✓✓
Cross-cultural understanding	✓*	(✓)*	✓*
New literacies skills	-	✓✓	✓✓
Internationalisation	-	(✓)*	(✓)*
Inclusivity	✓	-	✓✓
Design thinking			
People-centred thinking	✓✓	-	✓✓✓
Aesthetics	(✓)*	(✓)*	✓✓
Ethical leadership	✓	-	✓✓✓

Note: [#]Note: enquiry-based learning specifically refers to closed-loop, reiterative problem (enquiry)-based learning (Burrows, 1986).
*Depends on the specific skill development outcomes enunciated in the activity.

Essentially, an MOOC is designed to attract large numbers of learners to participate with an expert online. Through freely accessible resources, learners are guided through the study material, and the learning is enhanced in some cases by taking advantage of social media. Participation is entirely voluntary, is not accompanied by course fees, can be collaborative and is self-paced (McAuley et al., 2010). Learning activities are spread across a variety of different disciplines, technologies and platforms, and participants are encouraged to develop and post their own material, engage in collaborative exercises and provide ongoing commentary on the activities through Twitter and other social media (Williams et al., 2013).

There have been a number of efforts to explore the outcomes of MOOCs (e.g. Kop and Fournier, 2010; deWaard, 2011; Gao et al., 2012; Koutropoulos and Hogue, 2012; Williams et al., 2013). Articles cover a

variety of topics from conceptual analysis and framework to case studies and the technology (Liyanagunawardena et al., 2013). They are generally written from the learners' perspective although there is some analysis on institutional impacts. In general, however, there is a lack of data on the experiences and workload of facilitators (Mak et al., 2010), although Kolowich (2013) found that faculty spent a vast amount of time supporting this type of learning.

Three different types of MOOCs have evolved: (1) courses that are based on a connectivist approach – use multiple resources and media; (2) courses that are similar to traditional courses but the material is simply transferred to a digital format and made available online; and (3) courses that focus on vocational training with simulations to teach and assess practical skills. The majority of MOOCs available are either connectivist or more traditional (Daniel, 2012; Rodriguez, 2012). Although students access MOOCs from around the world (Waldrop, 2013), the majority of course registrants are from the developed world (deWaard, 2011; Kop, 2011; Koutropoulos et al., 2012), which rather defeats the intended purpose of fostering global access.

There are relatively little data on the reasons students participate in MOOCs (Liyanagunawardena et al., 2013). Stanford University's Learning Analytics group reported that students registering for MOOCs at Stanford fall into one of the four categories: 'auditors', who watch the material but do not take the assignments; 'completers', who complete the material and take the assessments; 'disengagers', registrants who quickly disengage from the experiences; and 'samplers', individuals who periodically dip in and out of the activities (Kizilcec et al., 2013; Mackay, 2013). However, as MOOCs from Stanford are different from those offered in a constructivist format, this categorisation may not be appropriate for the total population of students registering for MOOCs.

The advent of MOOCs has raised a number of issues and concerns including the quality of the learning experience (Milligan et al., 2013). These include intellectual property rights (Daniel, 2012; Porter, 2014); facilitator time and workload (Kolowich, 2013): abuse of trust in the system (Shimbun, 2011; Kim, 2013); and credit recognition (Coursera, 2013; Levin, 2013).

The greatest concern, however, is completion rates. MOOCs have high withdrawal/dropout rates (Koutropoulos et al., 2012). Although exact data on completion rates are not readily available, one report by Jordan (2013) documents that the highest completion rate was 19.2% but that the majority of MOOCs in this study had a completion rate of about 10%. There are also no data on the quality of the learning achieved with

MOOCs, or on the experiences of individuals who do not complete the courses (Koutropoulos et al., 2012; Liyanagunawardena et al., 2013).

The effectiveness of MOOCs on inculcating key learning outcomes is shown in Table 2.1. These are set against the crucial skills identified for the citizen scholar. MOOCs provide opportunities to be engaged with and practise new literacy skills and specifically designed courses can address other learning outcomes of resilience, creativity and innovation but the extent of the effectiveness of these is limited by the medium and the completion rates. Participation in MOOCs is essentially focused on individual commitment and contributions and less on the ability to work in teams and does not provide opportunities to practise ethical leadership.

Enquiry or Problem-based learning (EBL)

The literature abounds with different definitions of problem- or enquiry-based learning (Summerlee, 2013). In many cases, the definition is loose and refers simply to presenting a class with an issue or problem to illustrate an example made in a didactic lecture. For the purpose of the current discussion, EBL is critically defined as an approach to teach the *process of learning*. This definition emanates from the revolution in medical education that emanated from McMaster University in Canada in the 1960s (see review: Pallie and Carr, 1987). Furthermore, the discussion in this chapter is limited to a specific type of EBL referred to as *closed-loop, reiterative problem* (or enquiry)-*based learning* (Barrows, 1986) – see Murray and Summerlee (2007) for an in-depth discussion.

Since its development, there have been a number of articles reviewing the impact of EBL on medical education (Schmidt et al., 1987; Vernon and Blake, 1993; Nandi et al., 2000; Newman, 2003; Koh et al., 2008). The studies range from the impact on student learning outcomes to comparisons between the academic abilities of students taught by traditional methods and that of those in enquiry-based curricular, to institutional preparedness and capacity, to facilitator time, work-load and the competences of practising physicians. In general, the conclusions lead to the view that the content knowledge of EBL students is no different from their counterparts in traditional curricula but that soft skills in terms of coping with uncertainty, appreciating legal and ethical aspects of the health care, communication skills, satisfaction and self-directed learning are superior for EBL students. Although such skill development sounds positive, this has to be balanced against the resources and workload of faculty engaged in supporting EBL (Koh et al., 2008).

There are relatively few studies published on the use of EBL in non-professional programmes, but data are available from two longitudinal studies on the impact of students taking *one* EBL course in the first year of university at the University of Guelph, Canada (Murray and Summerlee, 2007; Summerlee and Murray, 2010). These first-year courses were designed specifically for students entering university to teach them the *process of learning*, and results have shown that skills learned in these classes are transferrable to other learning situations, improve the academic performance of students throughout their university experience (compared with matched-pairs who did not experience the problem-based course), increase the commitment of students to deep learning and independent research and broaden students' participation in volunteer activities and international experience.

Most of the work on retention associated with EBL is available from medical schools (Schmidt et al., 1987; Vernon and Blake, 1993; Nandi et al., 2000; Newman, 2003) or engineering schools (Jiusto and DiBiasio, 2006) where there is a strong link between enhanced engagement and retention with EBL.

Focused on the process of learning, EBL promotes *design thinking* by placing the learner at the centre of the learning experience; *team-work* through authentic and effective collaboration; *creativity* in researching learning issues and in resolving problems; and *resilience* in terms of the capacity to be flexible, adaptable and to learn from mistakes (Murray and Summerlee, 2007; Summerlee and Murray, 2010). A comparison of the effectiveness of EBL in inculcating crucial behavioural skills is shown in Table 2.1.

Conclusion

Universities recognise, and are responding to, the pressures for change. There are efforts to link the theory of cognitive development with approaches to learning that might restore the lustre to higher education and might reignite the magic of the learning experience. Three examples of innovations in university education were discussed in this chapter. Among the examples, only EBL appears to fulfil the learning outcomes that are essential for effective university education today and fostering the Citizen Scholar.

Each of the three approaches support the contention that learning experiences need to stimulate and challenge the learner, that feedback and reinforcement (from peers and from experts) is important, that the exercises must be meaningful and relevant to the learner and offer a

degree of choice and control about progress through the experience and that the evaluation strategies should be focused and have clear expectations. However, the design of the three options is different from a theoretical construct: the design of experiential and EBL are centred around the seven principles of good practice in education enunciated by Chickering and Gamson (1977), while MOOCs are primarily designed as online experiences that seek to foster engagement.

The lure of MOOCs is the vast number of students who might be educated with one course offering. This generates the illusion that MOOCs are substantially cheaper and raises the expectation that MOOCs would be more cost-efficient. However, not only are there significant challenges with these types of courses that are largely unresolved but also the completion rates are very poor which casts a serious doubt on the overall cost-benefit of MOOCs (at least at the present time).

In contrast, the significant record of impact of EBL and EL suggests that while more expensive on resources in the immediate term, the impact on deep learning is far greater, retention and performance are improved, and the resultant level of increased commitment to the institution and to learning through empowering engagement is more likely to be cost effective in the longer-term. In addition, EBL enhances the crucial skills of resilience, team-work, creativity and design thinking: the skills that embody the type of adaptable, creative thinkers who, engaged with the new literacies, can contribute as a citizen scholar to tomorrow's society.

Acknowledgement

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3
Educating Citizen Scholars: Interdisciplinary First-Year Seminars at the University of Guelph

Jacqueline Murray

Introduction

Long ago, in another time and place, in another world really, Alvin Toffler published a prescient book entitled *Future Shock* (1970). Toffler outlined the trauma, disorientation and stress that would affect individuals and societies as a result of 'too much change in too short a period of time', in particular, the accelerated pace of technological change and the concomitant information overload.

Traditional education and the traditional organisation of knowledge are proving to be wholly inadequate to cope with the rapid change and increasing complexity – political, social, environmental and so on – that was unimaginable even a few decades ago. In education, there is a chain of blame and a litany of shortcomings stretching from critiques of primary and intermediate schools to the academic shortcomings of secondary students entering university. The situation is acute for postsecondary institutions, which simultaneously face funding reductions and increasing enrolments as well as criticism from parents and employers that graduates lack the skills to succeed.

North American universities are not unique in the challenges posed by students with varying degrees of preparedness. As early as mid-1950s, first-year seminars were implemented at the University of Melbourne, Australia, to remediate the presumed deficiencies of entering science students. By the mid-1980s, there was a widespread perception that the diverse groups of students entering Australian universities were

insufficiently prepared (McInnis, 2001). In South Africa, university enrolments doubled during the 2000s and new tertiary institutions were opened, resulting in students entering with disparate preparation and high attrition rates, all complicated by enduring racial disparities (Scott, 2009).

What is evident internationally is that universities are desperately unprepared to educate students to cope with myriad contemporary disruptions of various origins, let alone the complexities of the future. But, the future is now and the evidence is compelling; fundamental and radical pedagogical change is imperative. Change does not come easily to universities and a professoriate that sees itself as 'guardians of civilization'.

Witness the ubiquity of large impersonal lectures, widely considered to be the most efficient means to transfer content to the largest number of students and often delivered with little innovation and no encouragement for interaction. Such lectures were first developed at the University of Paris in 1200. The lecture was not designed to process large numbers of students; rather it was to compensate for the fact that the master was the only one who had the book, so he read it aloud (in latin: *lectura*) to the class. Now, however, not only does the whole class have the book, more significantly, but they have the Internet and are overwhelmed by gigabytes of undigested, uninflected, unassessed information that they desperately need to learn how to analyse and critique. Yet, lectures and discipline-based content delivery continue to dominate university education. This inertia persists despite the oft-cited recommendation by the Boyer Commission (1998) that to improve the quality of university education a radical reconstruction is required.

One of the challenges associated with pedagogical change is that it requires a shift in focus from teacher to learner and from content to process and skills development. Various respected educational theorists have promoted this shift. For example, Bloom's *Taxonomy* (1956), still considered a model for higher-order learning outcomes, focuses on qualities of mind and competencies rather than content acquisition. Similarly, Chickering and Gamson (1987) identify good teaching as primarily relational and reciprocal between student and teacher. In addition to outcomes, there is considerable interest in predictors of student success, particularly at the first-year level. Researchers have focused on such factors as university entrance grades and have measured a wide variety of demographic, psychological and cognitive considerations (McKenzie and Schweitzer, 2001).

Mary Ellen Weimer (2003) suggests that it is not so much entrance qualities that dictate success in the first year, rather student success is hampered by the profound disconnect between learning and teaching. Bloom and Krathwohl (1956), Chickering and Gamson (1987), and Weimer (2003) challenge us to stop looking for answers by enumerating student characteristics or perceived deficiencies. Rather, they dare us to reject traditional considerations, such as discipline content and objective assessment, and to refocus on learning rather than teaching. So, too, they urge universities to relinquish the certainty of the book's content and instead empower students to be autonomous learners and, as the rest of the authors in this collection argue, Citizen Scholars.

One educational reform that flows seamlessly from the recommendations of Bloom and Krathwolh, Chickering and Gamson, the Boyer Commission and Weimer is a reconceptualisation of the first year of postsecondary education. This is a critical juncture at which to engage students to take ownership of their own learning and to provide a learning context in which students can develop the skills necessary for their subsequent education (Greene et al., 2004). Courses that engage students in broad and deep learning, in research and synthesis, are frequently offered now as capstone courses because of the erroneous belief that first-year students lack the maturity and prior knowledge of senior students (Rogers et al., 1993). However, first-year students are not so embedded in a disciplinary worldview and so may be more intellectually flexible and able to maximise the benefits of interdisciplinary perspectives (Krometis et al., 2011).

One method that has been my focus – and is the focus of this chapter – is the development of a series of first-year seminars. First-year seminars are an important means to redress some of the current deficiencies in postsecondary education. There are various types of seminars clustered under this umbrella, however, from skills development to disciplinary content, to pre-professional training. In other words, not all seminars are the same, and they can provide various learning with different goals and learning outcomes. It is critical to identify what type of seminar is under discussion and how effective it is.

First-year seminars: Background

First-year seminars first appeared in the 1880s at Boston University (Mamrick, 2005). These seminars were designed to orient new students to the campus and the expectations they would face at university. In that

sense, they were transitional seminars, as opposed to those with an academic focus.

Boston University's innovation has been linked to an increasing view in the United States that universities were in *loco parentis* and consequently had greater responsibilities towards their students. The incidence of seminars increased until, by 1930s, they were offered by 33% of universities and colleges in the United States. It was not until the 1960s, when universities were no longer in a pseudo-parental role, that their numbers began to decline. However, first-year seminars gained prominence again in 1980s, as university enrolment increased along with growing concerns about students' preparation and transition to higher education and an increasing institutional preoccupation with persistence and retention rates (Mamrick, 2005).

First-year seminars have been identified as the most common means by which universities and colleges in the United States intervene to address the educational and curricular deficiencies in the education of first-year students (Jessup-Anger, 2011). The average size of seminars is 25 or fewer students, and 90% of institutions surveyed in 2000 offered academic credit, generally as an elective (Mamrick, 2005). Five types of first-year seminars have been identified: extended orientation (often referred to generically as Univ 101) and similar transition-focused seminars; academic seminars with uniform content; academic seminars with various themes and topics; pre-professional or disciplinary seminars and seminars that focus on basic study skills (Mamrick, 2005).

Transition or orientation seminars are gradually being replaced by more academically focused versions. There has been specific criticism of this trend from supporters of transition seminars with one study finding that the focus on transitional activities, such as generic study skills and health education, were critical to support student retention and persistence (Porter and Swing, 2006). These seminars also tend to be taught by university staff rather than faculty (Friedman and Marsh, 2009) which has led to the suggestion that the staff instructors are less driven by the imperatives of content and coverage and consequently were better able to help students develop thinking skills (Lattuca et al., 2004). There has also been a suggestion that students who take academic seminars rather than those focused on study skills do not necessarily earn higher grades or have higher persistence rates because of the absence of the usual Univ 101 content (Cavote and Kopera-Frye, 2004).

Perhaps the most focused defence of transitional seminars is that of Friedman and Marsh (2009), who compared transitional, skills-based seminars with interdisciplinary academic ones. Three themes were

available to students in the cognate disciplinary major. Students did not enrol freely but a counsellor selected the specific seminar in which each student would enrol. The new seminars would better be considered hybrid rather than exclusively academic. They maintained some aspects of the transitional seminars, while deleting some of the original content to accommodate the new academic content. The study did not examine specific academic learning outcomes but compared the new hybrid version with the long-standing transitional seminar format. The report concluded that students who took the hybrid seminar lacked the same degree of knowledge about the campus and its services and that transition seminar students reported higher satisfaction with university services and their sense of belonging and acceptance within the community (Friedman and Marsh, 2009). These discussions confirm that transitional seminars have different goals, content and approaches from academic seminars.

Many versions of academic first-year seminars in actuality are hybrids or incorporate other forms of pedagogical compromise. In one example, a large lecture-based First-Year Experience course was complemented by small breakout groups of 25 students. Tutorials attached to large lectures do not meet the criteria of a first-year seminar because they are not freestanding and do not have an independent credit weight. In this hybrid, instructors from three different disciplines cooperated to develop a separate multidisciplinary 'inquiry course' as subsidiaries of the lecture section. The tutorials included field trips, service learning, collaborative learning and capstone projects. They also incorporated some features of transitional seminars such as introduction to student services or introduction to the library.

The trouble with these exercises, however, is that uninformed students can see them as precisely that – an exercise to be endured, because it lacks contextualisation and has little to attract or keep student engagement. The instructors also assigned students to their roles in various learning activities (Stebleton et al., 2010). Thus, as with other hybrid seminars, students did not have the opportunity to exercise independent decision-making.

The instructors reported a high degree of student engagement and an appreciation of the applied aspects of the group activities. The outcomes reported were based on students' reflective journals. The mixture of various learning outcomes and academic and pedagogical goals make it difficult to assess this tutorial-based approach to first-year education. Were the learning objectives diluted by the hybrid nature of the tutorial sections? How did the large number of high impact educational

practices affect them? While seeking to emulate many of the strengths, this experimental hybrid does not align with the characteristics of first-year seminars.

Among academic seminars, there are a variety of organisational and content strategies. First-year seminars might be available to students majoring in a specific area such as those offered to science students at the University of British Columbia[1] or social science students at McMaster University.[2] Another approach is to offer first-year seminar programme that is collectively multidisciplinary, although individual seminars are disciplinary.[3] There are many examples of first-year seminars that reorganise material and employ new pedagogies, particularly with respect to active and collaborative learning, but which continue to focus on the organisation of knowledge according to traditional disciplines.[4]

Fully multi- or interdisciplinary first-year seminars, then, have the greatest potential to enhance student engagement and promote learning outcomes that foster the Citizen Scholar. Interdisciplinary courses facilitate the development of the values of citizenship along with the acquisition of higher-order learning outcomes (Lattuca, Voigt and Fath, 2004). Additionally, first-year seminars, especially those that use enquiry-based learning pedagogy,[5] encourage students to develop skills such as critical thinking and analysis, the ability to evaluate evidence from the perspective of multiple disciplines, to be comfortable with ambiguity and to respect diversity (Summerlee and Murray, 2010). The interdisciplinary First-Year Seminar Program at the University of Guelph provides an excellent example of reconceptualising education at the first year, in ways that prepare students for the challenges and responsibilities of being Citizen Scholars.

First-year seminars at the University of Guelph

The University of Guelph is a research-intensive, comprehensive university located in southern Ontario, Canada. Its student body is comprised of some 22,000 undergraduate and 2,500 graduate students, with 700 faculty members. Approximately 4,000 students enrol every September, the majority of whom reside on campus. Approximately 76% of Guelph students volunteer more than five hours a week in the community, the highest incidence of student volunteerism in Canada. The university has a student retention rate of approximately 90%.

As is increasingly the case in Canadian universities, which face tremendous enrolment pressure, most first-year courses are large lectures, with minimal opportunity for students to interact with their

professors and peers. The First-Year Seminar Program is an initiative to enhance and personalise student experience, promote active and collaborative learning, and address the principles of good education set out by Chickering and Gamson.

The First-Year Seminar Program offers interdisciplinary academic seminars under the title and course code: Interdisciplinary University1200. Founded in 2004, the programme offers a diverse array of seminars that cross the boundaries of disciplines and address some of the most interesting or challenging issues of our day. Annually, 35–45 seminars are offered; they are capped at a maximum of 18 students per class. Demand consistently outstrips capacity, with only about 700 students having access each year. The programme has a minimal attrition rate – between 3 and 4% – underscoring the popularity of the seminars and how they engage students.

A criticism of the programme is its cost. Certainly, maintaining class sizes of 18 students per instructor represents a huge cost compared to lecture sections of 500 students, even when the course might have two or three lecturers and multiple teaching assistants. At Guelph, individual donors that support this approach to education currently fund the First-Year Seminar Program – meaning the overall university teaching budget is not impacted by the program. It is important, however, to recognise that high impact teaching and high impact learning comes at a price. Moreover, if universities were to reassess the traditional course weightings that pertain across institutions, it would be possible to reduce the costs of first-year seminars.

Arguably, the quality and persistence of student learning in seminars warrants a higher credit weighting than that of a large lecture. Students report spending as much as five times the time and effort on their seminar as on all their other courses combined (Summerlee and Murray, 2010). If students were permitted to take fewer courses, and if the high impact, transferable learning outcomes were credited more appropriately, the costs of delivering first-year seminars would be lower compared to traditional lectures.

There are other models that could also reduce the cost of first-year seminars. At Guelph, we have been developing programmes to encourage peer facilitation where senior students are trained as facilitators. The senior students gain academic credit for the exercise and have the motivation and training to serve as excellent facilitators and role models. As yet, we do not have the evidence to determine the extent to which this is successful innovation but student feedback from both the first-year students and the senior student facilitators is very encouraging.

The Guelph programme is uniquely structured. Significantly, it is free-standing and is not affiliated with any college, department, discipline or knowledge perspective. Every seminar is thematic and interdisciplinary and counts as an elective according to a student's programme. Seminars have the same credit rating as a full first-year course that, in Ontario, is a standard 0.5 credit.

The comprehensive and inclusive nature of Guelph's First-Year Seminars distinguishes it from other programmes that are tied to degree programmes or faculties, schools or colleges. For example, North Carolina State University implemented its inquiry-guided seminars in the College of Humanities and Social Sciences (Greene et al., 2004), while Michigan State University developed separate first-year seminar programmes in each of the sciences, social sciences and humanities (Youatt and Wilcox, 2008). This reinforces the critique of seminars that are linked, disciplinary-based explorations of shared themes, which too often do not inspire truly integrated interdisciplinary analysis. In particular, it is rare for seminar programmes to incorporate fully the sciences and liberal arts. This is unusual because most seminars are offered within degree programmes such as science or social science or in professional programmes such as engineering or business. This approach tends to reinforce the worldview of the discipline and profession rather than broadening students' perspectives (Krometis et al., 2011).

In contrast, Guelph's seminars tend to reject the constraints of traditional interpretive approaches and to foster intellectual flexibility in our students. The full diversity of our campus is represented in the programme, from agriculture to veterinary science, from philosophy to psychology to pathobiology. Both facilitators and students are drawn from every corner of the campus.

Fulltime faculty, senior administrators and academic professional staff facilitate First-Year Seminars. It is not uncommon to have such a diverse complement of seminar facilitators (Tobolowsky, 2005), although at Guelph the majority are fulltime faculty members. The programme explicitly encourages topics and themes that break new ground and intrigue students. These may emerge from the facilitator's area of research or from another area of interest. The goal is to offer students topics and themes that will interest them and to construct opportunities for students' personal experiences to enhance their motivation for learning (Jessup-Anger, 2011). In other words, topics should have some immediacy and intrigue students and pique their curiosity. This in turn addresses the preeminent goals of teaching: instilling a desire to

learn, stimulating intellectual independence and facilitating skills development (Dunkin and Precians, 1992). Moreover, there is agreement that presenting students with complex, real-world problems enhances learning and helps students to develop skills transferrable to the 'real world' (Lattuca et al., 2004).

One of the underlying educational principles of the First-Year Seminar Program is to privilege process over content. Consequently, the programme does not permit examinations. Lectures, either by the facilitator or by guest speakers, are similarly rejected because they render students to be passive rather than active learners. Every seminar is built on the principles of active and collaborative learning and may incorporate service learning, experiential learning or community-based learning as appropriate. This is a considered a component critical in supporting deep and engaged learning (Healey, 2005).

Instructors are encouraged to employ diverse and innovative assessment strategies and can be as creative, 'out of the box', and nontraditional as they wish. The breadth of assignments has ranged from writing and producing radio documentaries to devising projects with community organisations, from explaining contemporary science to street youth to working with a leading Canadian composer to write music. Clearly, such a breadth of learning activities meets multiple proficiencies of the Citizen Scholar.

In order to ensure that proposals meet the goals of the programme, they are vetted by a committee of experienced faculty who work with individual instructors, as necessary, to develop a seminar that provides students with an unparalleled learning experience. The programme offerings are not fixed but are changed and reinvented every semester. Some facilitators offer seminars regularly, others rotate their participation through annual or biannual cycles. Some facilitators cycle through a variety of topics while others are consistent.

This somewhat chaotic approach to curriculum is one of the programme's great strengths. Seminars are always fresh and the facilitators are constantly modifying and updating content or structure or pedagogy in ways that ensure they are as engaged as their students.

One of the fundamental principles of the First-Year Seminar Program is that any first-year student is able to take any seminar. There are no formal or implied prerequisites and none of the seminars articulate with, or provide foundational knowledge for, any degree programme. As a consequence of this open enrolment policy, the demographics of each seminar are diverse and somewhat random in terms of degree programme or academic background preparation. Budding historians and

biomedical scientists share ideas with music or commerce or agriculture majors. For most students, this is the most diverse classroom they will be in during their university education. Moreover, given the enrolment cap of 18 – and some are divided into even smaller groups – it may well also be the smallest course most students experience as undergraduates. The size and diversity of the students' backgrounds can lead to intense discussions and enduring relationships.

The First-Year Seminar Program acknowledges that learning is fundamentally a social and collaborative activity. Each facilitator may implement collaborative learning according to the needs of each group but all highlight the interdependence of the members of the group and the individual's accountability to the other group members. It is this way the students experience the strengths and challenges of true collaboration, as opposed to the much (and appropriately) maligned 'group work' (Stebleton et al., 2010). Thus Guelph's Seminars are structured so that students have an opportunity to test and hone their leadership abilities. They begin to understand themselves as collaborators and team members in the context of diverse groups. And they learn both to respect others and to manage conflict. These are among the core competencies of the Citizen Scholar.

Among the suite of transferable skills that seminar students develop, most fundamental are critical thinking and the ability to analyse and assess the veracity and reliability of multiple types of evidence. This process moves well beyond the assessment of bias to engage with a variety of data: for example, scientific reports, social scientific statistics, qualitative evidence, the cultural knowledge found in art, literature and music, and through consulting experts. In this way, students in First-Year Seminars engage with multiple ways of knowing and integrate the perspectives of multiple disciplines and so develop the skills of analysis, synthesis and evaluation associated with interdisciplinary education (Lattuca et al., 2004; Machemer and Crawford, 2007).

The University of Guelph's First-Year Seminars exhibit a remarkable alignment with the Proficiency Clusters for the Citizen Scholar set out above by Arvanitakis and Hornsby in introducing this text. Significantly, although no individual seminar is likely to encompass every attribute of every cluster, every seminar in the programme incorporates attributes from multiple clusters, ensuring that values and education of the Citizen Scholar are nurtured in every student who completes a seminar. Appendix I provides a brief description of sampling of seminars, articulating which clusters and attributes each addresses. Of course, given the mandate of the programme, every seminar does include team-work, interdisciplinarity, critical thinking and reflexivity.

Research on Guelph's First-Year Seminar Program

Upon surveying the literature associated with First-Year Seminar programmes, it is striking to note how most of the discussions are theoretical or descriptive. There is little research on the learning outcomes of the programmes and how they affect student experience of their learning and influence changes in behaviours. A number of research projects have been implemented in the First-Year Seminar Program at the University of Guelph in order to track and verify the enhanced learning experience of students, along with their learning outcomes. These are based on earlier research by Murray and Summerlee (2007) that focussed on the learning experiences and outcomes of their First-Year Seminar group. These studies undertook a detailed analysis of two seminars (total of 18 students) and now serve as pilots for larger studies across the entire First-Year Seminar Program. Most significantly, Summerlee and Murray (2010) found that students who took a First-Year Seminar that used enquiry-based learning pedagogy maintained higher grades throughout their programme and, by the end of fourth year, had a 10% higher grade point average compared with their matched pairs. Currently, there is a programme-wide study underway involving over 2,000 students, for which results are not yet available.

A concomitant study of students in the First-Year Seminar Program focuses on student experience of their learning. In the Winter 2011 and Winter 2012 semesters, 288 students were surveyed using a 5-point Lickert scale. The surveys were administered at the beginning of the course and upon its completion. They focussed on Processing Skills, Knowledge and Reasoning Skills, and the results of the pre- and post-semester surveys were calculated and compared to ascertain changes over the semester. Additionally, three separate pedagogies were identified in order to test effectiveness. Seminars using active learning of multiple types were compared with the results of those using enquiry-based learning. A third approach using enquiry-based learning in an online seminar was also examined.

Figure 3.1[6] focuses on the ability of students to read critically. The results demonstrate that there were significant changes in all seminars, irrespective of pedagogy, although the most significant increases occurred in those students in an enquiry-based learning seminar. The ability to read critically is considered essential to all areas of postsecondary education and it is one of the hallmarks of the Citizen Scholar. The data reveals that every First-Year Seminar enhanced students' abilities to read critically – something the students recognised themselves.
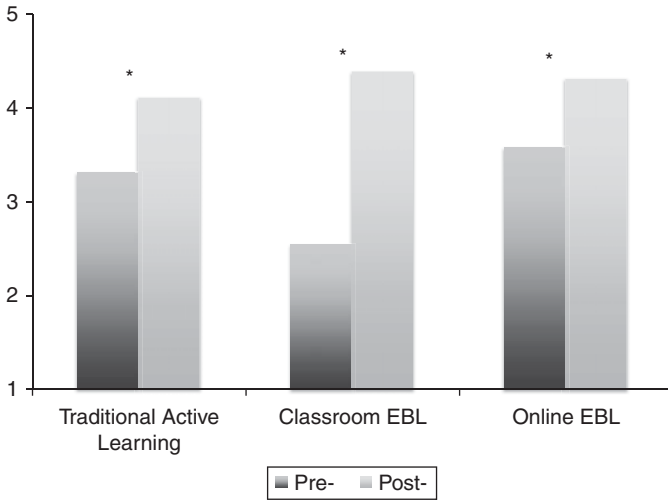
Figure 3.1   Critical and creative thinking: 'ability to read critically'
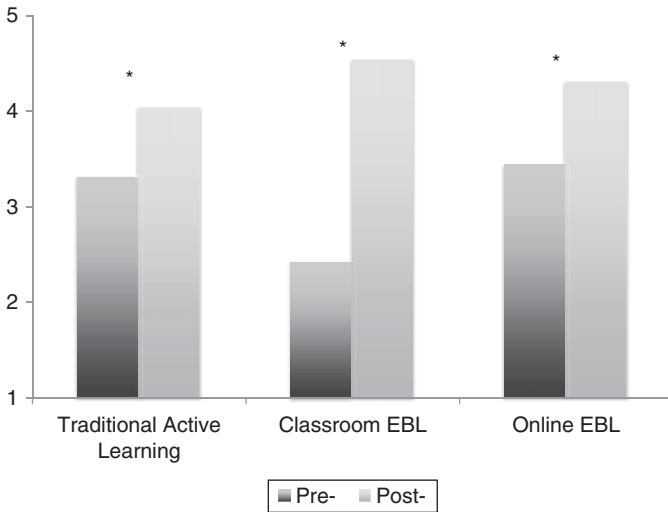
Figure 3.2   Literacy: 'comfort reading other disciplinary materials'

Comfort with reading other disciplinary materials is the focus of Figure 3.2. The ability to read across disciplines is the foundation and hallmark of a student who has experienced an interdisciplinary education. No longer hampered by the constraints of a single discipline, these students developed facility with the multidisciplinary toolbox that
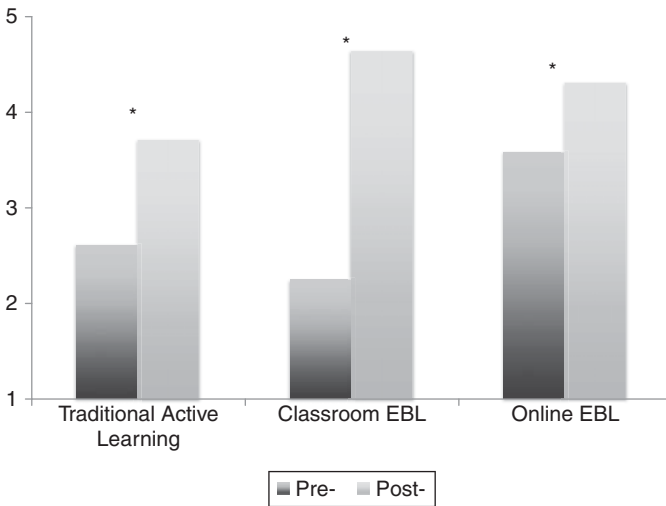
Figure 3.3   Professional and ethical behaviour: 'giving feedback to peers'

is essential for Citizen Scholar, as well as to interact with the complex and multifaceted issues of today's world. Students in all seminar groups reported a significant increase in their ability to deal with multidisciplinary material. Again, students from enquiry-based learning seminars reveal greater confidence but all First-Year Seminar students benefitted.

Figure 3.3 provides information on giving feedback to peers. Team work and collaborative learning is another highly prized learning outcome for empowered students. The survey reveals that all approaches to First-Year Seminars elicited a significant increase in confidence and the ability to give feedback to peers. Again, the enquiry-based learning seminars showed a greater increase but students in all types of seminars developed comfort as a team member and with that area of teamwork that requires the greatest trust, giving and receiving feedback.

Conclusion

There are a myriad of challenges facing higher education globally. Universities need to think creatively as they address the issue of how to ensure that the students they graduate are Citizen Scholars who have the skills, competencies and values that will prepare them to shape the future. Clinging to traditional disciplines and traditional pedagogies is almost wilful stubbornness in the face of educational and social challenges and the wealth of evidence that provides incontrovertible

evidence that the old ways of education cannot meet the needs of the future.

First-Year Seminars are frequently mentioned as a means to enhance under-prepared students but, more than remediation, they provide as space in which students can challenge themselves, make mistakes, learn and grow, and ultimately take intellectual flight. But not all types of seminars can inspire and achieve higher-order learning outcomes. Some remain narrowly focused on decontextualised skills or narrow disciplinary remediation. As the First-Year Seminar Program at the University Guelph clearly demonstrates, seminars that are interdisciplinary, immediate and intriguing and that use active learning can empower students to take control of their own learning. And within the parameters of a wildly successful programme that employs multiple active learning pedagogies, one pedagogy, enquiry-based learning stands apart. First-Year Seminars, especially those using enquiry-based learning, can transform learning. They can change students from empty vessels awaiting the words of a lecturer and empower them to become engaged collaborators in the educational process. This is how we can inspire and educate Citizen Scholars; helping to overcome the trauma of change and the inertia of information overload. Our way to the future is clear if we have the courage to change.

Appendix I: First-Year Seminars/Citizen Scholar: Examples of Alignment

The art of everything: Exploring the creative process

This seminar addresses most closely the Design Thinking and Creativity and Innovation clusters as students reflect upon how and where ideas originate and the effectiveness of innovation and the creative process, Students move beyond their own experience and engage in the fine and creative arts. Students engage in life drawing, write poetry, sit-in with a symphony orchestra and perform publicly a song they compose. Their status as artistic neophytes means students experience both adaptability and mistakability, along with developing new literacies.

Global environmental conflicts viewed through a local lens

This seminar took as its focus a local environmental conflict among the industry representatives, environmentalists, district officials, scientific

consultants and First Nations stakeholders. By gaining a deep under-standing of both the similarities and differences among these opposing viewpoints, students came to understand the challenges to arriving at the most equitable and sustainable solution. Using the perspectives of environmental science, environmental ethics and the principles of mediation, the students interviewed the stakeholders including the mayor, corporate officials and environmental activists while they were engaged in protest actions. This real-world experience required students to work as a team and to exercise ethical leadership that incorporates multiple attributes of Citizen Scholars.

Living with quadriplegia

This seminar challenges students to understand the scientific and med-ical perspectives on quadriplegia in the anatomy lab and as the social and lived experience of people living with spinal cord injury. From the anatomy lab to living a day in a wheel chair, students come to a deep and complex understanding of multiple questions including the psy-chological, emotional and economic challenges for people living with a spinal cord injury. Students have new experiences of diversity and inclusion, which leads them to develop ethical leadership and reflex-ivity, along with the realisation that the medical cannot be separated from the personal or the political.

Do genes fit our values? Gene technologies

This seminar uses enquiry-based learning to examine various challeng-ing situations that have emerged from the mapping of the human genome. With the increasing sophistication and pervasiveness of gene technologies, what was once considered to be the stuff of science fiction is now common. Through analysing scenarios and research-ing the scientific, social and ethical issues that emerge, students gain facility in multiple disciplinary approaches to complex questions such as genetic modification, cloning, disease mutation, the potential of genetics in human reproduction or the possibilities of a 'real' Jurassic Park. The ethical implications of technological innovation are an abiding concern. Students are self-directed in this pedagogy, identify-ing what they know, what they don't know and what information they need to move forward. Through regular group processing, they learn how to give and receive feedback and to appreciate their own abilities.

Notes

1. See http://science.ubc.ca/students/new/first/113.
2. See http://www.economics.mcmaster.ca/socsci-1/students/inquiry-courses.
3. See http://www.artsci.utoronto.ca/current/course/fyh-1.
4. See, for example, the reformulation of teaching at Michigan State University discussed by Youatt and Wilcox (2008).
5. See Armstrong and Summerlee's Chapter 2 in this book.
6. These figures, developed by N. Lachowsky, are drawn from a forthcoming study by Jacqueline Murray and Nathan Lachowsky.

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4

The Citizen Scholar: The Academy at the University of Western Sydney

Angelo Kourtis and James Arvanitakis

Introduction

In 2013, the University of Western Sydney (UWS) – now Western Sydney University – developed a new programme with two broad aims. Confronted with a changing higher education environment in which the sector is increasingly directed to be 'competitive', the university that had traditionally lacked the prestige of Australia's 'sandstone' institutions moved to differentiate itself. Secondly, and more importantly, a collection of administrators and academics used this changing environment as an impetus to reflect on the purpose of the contemporary university.

It was from this perspective that we began to visualise the ideal graduate. Private industry and government were demanding that graduates be 'work ready' and that universities forge closer links with industry. A tertiary degree has become the minimum entry requirement for many employment opportunities which only a decade before were available with secondary qualifications. Additionally, research 'outputs' began to trump scholarly pursuit. Universities can be at risk of losing our way as we respond to these changes. It is not that these issues are necessarily inherently concerning, but that they lack balance.

This was highlighted in a 2012 report written by the consultants Ernst and Young, titled *University of the Future: A Thousand Year Old Industry on the Cusp of Profound Change*. The report called on universities to better *specialise* and work more closely with industry through 'research partnerships and commercialization' (2012: 6) and to 'deepen [the] commercial skills and capability' (2012: 24) of staff and graduating students.

Such reports are insightful, at least for a better understanding of business and industry attitudes to tertiary education and of the imbalance

that concerns us. The document (2012: 9) examines commercialisation and *work ready* skills; yet, there is only passing reference to building community links or 'community engagement'. While there is no doubt that universities must continue to establish and maintain strong relationships with business and industry, doing this at the expense of engaging with the surrounding community places universities in an even more vulnerable position and is unsound, for two important reasons. First, it is likely to result in graduates whose skills are confined to a specific point-in-time (and place) skill set, and hence less prepared for a rapidly changing world. Secondly, such skill development can be delivered by any number of suppliers. This is not to say that industry-oriented skills should not be a 'deliverable' of universities. Rather, we seek to emphasise that the for-profit sector should be understood as one of the many stakeholders in any university community.

Our response?

After many discussions, consultations, deliberations, meetings with alumni (both recent and long-graduated), current students (some of whom were strongly supportive of the university and others who can best be described as critics), business and industry (large and small) and other organisations (that ranged from the defence forces to human rights groups), we identified what we eventually conceptualised as the Citizen Scholar.

The Citizen Scholar takes us in two contradictory directions. It encourages us to return to the very roots of the Western knowledge tradition and the Socratic ideal. Scholarly pursuit has intrinsic value in itself and should see graduates who are lifelong learners as well as active and engaged citizens. Such citizens aim to live an ethical and fulfilled life, continue their pursuit of knowledge, are prepared to question the status quo and engage with the community.

Simultaneously, we seek to future-proof education by imagining a future that is yet to appear. The question is how to achieve this? Our answer: Encouraging students to embrace change and uncertainty, to acknowledge the limitations of their disciplinary knowledge and to accept that their degree is not necessarily an instruction manual to a career path.

The vehicle to achieve our vision of the Citizen Scholar became The Academy at the University of Western Sydney (hereinafter The Academy). The Academy was designed as a programme, rather than a School a Department, for reasons explained below. At the time of writing, The Academy has been in operation for two years and is thriving:

it attracts national and international interest and is forging closer links with industry, community organisations and government. Though it is relatively early days, there are sound indicators that The Academy is fostering the kind of graduate that can be described as the Citizen Scholar.

The remainder of this chapter outlines the intellectual origins of the Citizen Scholar and discusses the way we are achieving the associated goals through The Academy. We write this from our shared perspective as the leading administrator and academic behind its establishment and operation. In so doing, we present both the challenges and pitfalls, as well as the successes.

We begin by outlining the ethos behind our methodology. Reflecting our community engagement, teaching and research activities, we see our own personal journey being fundamental in the establishment of The Academy. Though we as individuals had followed very different paths, our shared context is social justice principles, and we see *education* as fundamental to achieving this. From this perspective, we use the language of contemporary, engaged teachers, administrators and researchers (Arvanitakis, 2014). When designing and implementing the curriculum and teaching approaches discussed below, we mobilise a participative method, directly consulting not only colleagues but students. This can best be described as a co-development approach to curriculum design (Folley, 2010). It means the development of the programme becomes interactive, dynamic and self-reflective (Arvanitakis and Matthews, 2014).

This co-development framework is informed by feminist insights (Mies, 1991) and post-colonial theorists (Said, 1979; Nandy, 1983), is narrative-based and centres on participants and their goals (Arvanitakis, 2014). Educators, researchers and administrators agitate to identify and confront injustices and alienation, pushing for change. We do not simply observe and report, but participate and attempt to re-shape the world around us. We actively reject the assumption that there is one objective form of inquiry or knowledge (Stanfield, 1998) and acknowledge the variety of contextualised methods for engaging students and surrounding communities.

With this background, we first present an overview of The Academy, before presenting the theoretical underpinnings of the Citizen Scholar and the programme designed to achieve its aims.

The Academy at the University of Western Sydney

The University of Western Sydney (UWS) is a multi-campus Australian university in the Greater Western region of Sydney. It is relatively young,

founded in its current form in 1989 through the amalgam of a number of colleges.[1]

The student cohort is highly heterogeneous, representing the diversity of the local area – one of the most multi-cultural in the world. More than half of all UWS students are the first person in their family to attend a higher education institution; and 25% of students come from a low socio-economic background. Only 20% of students are mature age or non-school leavers. This is also reflective of the diverse and complex population centre of Western Sydney, the biggest in Australia, which includes streets and suburbs of significant wealth, as well as large social housing estates, and other sub-populations who are in many ways excluded from mainstream society.

For us, this student mix is exciting and challenging. In particular, being first in family to go to university can mean a deficit of *cultural capital*: the inherited knowledge and capacity of the upper-middle classes to succeed in the higher education environment. The university devotes considerable resources and effort to providing support structures for these students in particular. In addition, UWS College has been established as a pathway institution for those who initially lacked the academic background to enter university.

Despite these considerable challenges, the quality of the teaching, research and administrative staff has seen UWS ranked in the top 400 (of over 3,500 institutions) by the QS World University Rankings (2014).

It is in this context that UWS established The Academy. The programme emerged from the desire to both respond to the imperative of increased competition among Australian universities and to develop the Citizen Scholar. We will address each of these in turn.

From a specific differentiation perspective, the UWS mission has always been to serve the broad, diverse and ever-changing community of Greater Western Sydney. The challenge in a highly competitive environment was to attract the current school leaver (CSL) market that, we had found in our research, is heavily influenced by brand perception of a university. While UWS was in a healthy position, the longer-term future was uncertain under conditions of increased corporatisation and competition-based federal policy.

We did not want this to be an exercise in brand promotion only. In a time of hyper-marketing, we wanted to move beyond a brand and provide an *experience* that was 'more than a degree . . . a program of personal enrichment'.[2]

Our research identified various personal development and engagement programmes in existence across Australia's universities, but it was felt that they were limited in their reach, access and participation. Our

major concern was that they were more of a 'bolt on' – an add-on to a degree – rather than *embedded* within the core of the student and staff experience.

These discussions coincided with a University-commissioned Review of UWS Community and Regional Engagement (2012). The Review, while praising the general level of community engagement by UWS, also stated:

> Embedding engagement (and personal development programs) more deliberately and widely throughout the student learning experience would be compatible with the UWS mission. More particularly, the availability of coordinated and effective student in-service activity (volunteering, student philanthropy, mentoring), service learning, and civic engagement programs would be central to the success of an embedded student engagement agenda. Embedding engagement throughout the student lifecycle experience should be at the heart of the student engagement strategy, providing accessible opportunities for students to identify with and experience the notion of community or civic engagement and to serve as role models to future generations.

The Academy was identified as the vehicle that could deliver on these recommendations. Inspired by programmes such as those pioneered by Amhurst College at the University of Massachusetts, the aim became to establish a 'community of scholars' among the student population.

Specifically aimed at high-achieving students, the Academy is underlined by three specific core philosophies:

1. *Future thinking*: that we must provide an education that 'future-proofs' the education of the students by not simply focussing on the disciplinary knowledge of their degree, but on skills including *adaptability* and *mistakability,* as well as the various other proficiencies outlined in the Introduction to this book. The underlying principle here is that we need to ensure that students learnt a suite of skills to prepare them for whatever the changing social, cultural economic and political environment brings;
2. *Inter-disciplinary learning*: bringing students together from across the nine UWS schools so that they are exposed to academics from across all discipline areas. Importantly, it was agreed from the outset that we must exhibit the behaviours we asked of the students, so in the subject delivery, no single school or individual 'owned' the subject –

it was delivered by a cross-section of academics across the schools; and

3. *Leadership* based on relationships not hierarchy: Drawing in a cross-section of citizenship scholarship (Bang, 2005; Isin and Nieslen, 2008; Arvanitakis and Hodge, 2012; Arvanitakis, 2014), we wanted students to build empowering relationships rather than relying on traditional hierarchies.

From here, we developed a programme with three very particular dimensions:

• An academic programme of advanced coursework units (discussed in more detail below) with a high level of academic rigour. The Academy must first and foremost provide a high-quality learning experience;
• Experiential learning through diverse extra-curricular and service learning opportunities. Students can participate in recognised training programmes and leadership coaching; and
• Professional development: such as workshops on online literacy, privacy, employment readiness, goal setting.

Structurally, The Academy is an 'umbrella' programme rather than being established as a school or department. This was because we did not want to be captured by any single disciplinary perspective or seen as an alternative to any of the nine schools. Our mission was very clear as a result: to compliment the disciplinary knowledge that was being provided by the schools with a cross-discipline environment that would promote a range of skills, as outlined in the Introduction of this text.

The Citizen Scholar: an organic intellectual

The theoretical development of The Academy programme and its Citizen Scholar is sourced to the work of Antonio Gramsci and his 'organic intellectual'. While discussing the intricacies of Gramsci's political position is beyond the scope of this chapter, the key theme we draw on is the role of the intellectual in inspiring mass participation in social transformation. For Gramsci, the engagement of the broader population was essential in any social change; and the role of the intellectual was fundamental.

We specifically use this concept of 'engagement' – for philosophically, we have always worked to position the university as an engaged entity (see Arvanitakis and Hodge, 2012; Arvanitakis, 2014). In this way, the

university is not separate from the community but embedded, existing to serve the community rather than identified as an entity in and of itself. This does not mean that there is no room for a university to function in the development of theoretical or philosophical positions – the exact opposite – for these positions are most relevant in the context of where the university exists.

It is from here that we situate our position on Gramsci, for the Gramscian intellectual is the source of our inspiration. Gramsci's definition of the intellectual went much further than those of us who are privileged enough to sit with academia or research institutes – rather, he argued in his *Prison Notebooks* that, 'all men (*sic*) are intellectuals…but not all men have in society the role of intellectuals' (1929–35/1971: 10). That is, while everyone has intellect, like (almost) everyone can cook, not all of us have this social function (not all cooks are chefs).

For Gramsci, intellectuals were both embedded in and emerged from every group in society – any concept that we/they were a distinct or separate group is false. Further, Gramsci identified two kinds of intellectuals: traditional and organic. Traditional intellectuals are those that define themselves as autonomous and independent, and are seen this way by the broader population. In many ways, Gramsci saw this group as part of a historical continuity and aligned with social and ruling elites.

The second kind, and the focus of our work here, is the organic intellectual. To begin with, Gramsci envisioned that this group grew, as the name suggests, organically, along with the dominant social group and the education system. This system, according to Gramsci, maintains the status quo.

It is from the concept of the organic intellectual that we present the inspiration of The Academy and the Citizen Scholar. Gramsci's work covers thousands of pages and we do not aim to undertake a critique. Rather, we want to identify five specific themes that emerged from our work developing the Citizen Scholar vision and the programme that would bring this scholar to life.

To begin with, we agreed with the Gramscian conclusion that the education system, as it stands, tends to reproduce existing power relations. Though we are writing at a radically different time and place – a political prisoner writing from his cell during the Great Depression – we can see elements of the concerns that Gramsci was raising in our contemporary world. In many ways, our education system is re-producing the ingrained inequalities that we can see not only in universities but

across our society. We want to disrupt this system, ensuring that we do not simply reproduce, but instead promote the emergence of a different intellectual.

From Gramsci we learn that it is the organic intellectual who has the potential to emerge and challenge this status quo. To frame our work in Gramscian terms, we are interested in facilitating the emergence of the organic intellectual. While Gramsci was talking about organic intellectuals emerging from the working class, our interest is more expansive: to see intellectualism – in its broadest form – be co-developed with scholars who are also ethically minded citizens. It is important to note that we did not set a pre-determined ethical framework – though we both may have certain biases – we wanted the ethical framework to develop with the context of each student.

This vision may sound grandiose. But inspired by Gramsci, we took the position that each and every student has a capability to think, and think critically. From Gramsci's perspective, it was here that change was possible. We all carry

> some form of intellectual activity . . . , [and] participates in a particular conception of the world, has a conscious line of moral conduct, and therefore contributes to sustain a conception of the world or to modify it, that is, to bring into being new modes of thought.
>
> (1971: 10)

The third dimension of the Academy's Citizen Scholar programme inspired by Gramsci is this: we are not just interested in 'consciousness raising' but 'consciousness transformation'. That is, we see the aims of the programmes as not just being taught, but learnt: applied to the everyday lives of the students, or in Gramsci's words, 'in active participation in practical life, as constructor, organiser . . . not just a simple orator' (1971: 10).

In this way, Gramsci saw the organic intellectuals disrupting established social and economic relations. But to do this, the first step, and our fourth inspiration, was that we must be critically aware of our own part in those relations: 'the starting point of critical elaboration is the consciousness of what one really is' (ibid.: 323).

The final point to discuss in terms of Gramscian influence is his analysis of the schooling system. Even in the early part of the twentieth century, Gramsci raised concerns that the education system was becoming increasingly specialised. His response was a plea for education to take a more comprehensive form. He was concerned that schooling was

merely reproducing established patterns, and so he argued that there was a need

> to create a single type of formative school (primary-secondary) which would take the child up to the threshold of his choice of job, forming him during this time as a person capable of thinking, studying and ruling – or controlling those who rule.
>
> (Gramsci, 1971: 40)

Gramsci wanted the schooling system to move beyond the theoretical and, as we have noted, be relevant to the everyday. He wanted students, through both the work and their own reflection, to be active rather than passive or mechanical recipients (ibid.: 35). Like Paulo Friere (1970; 1998) decades later, Gramsci wanted education to break established power relationships.

The Academy curriculum: how is it different?

In designing the academic programme for The Academy, we decided that we did not want to follow a standard lecture/tutorial format. From both our experience and in the process of co-development, we found that students find this format uninspiring and lacking the opportunity for deep engagement.

Our philosophy for workshop delivery is a simple one: an hour is a unit of time, not the ideal segment of time for imparting information. Drawing on research from Gibbs (1992) and Bligh (2000) that attention span is limited to approximately 12–15 minutes, we did not see establishing a new suite of subjects to deliver content via a one-hour lecture as beneficial. Bligh's (2000) work confirms that interaction in classroom settings increases retention by 400%. As such, we wanted to encourage a highly engaged and interactive environment that would see high levels of attendance and engagement.

We designed the subjects around three-hour workshops in which we employed the following guidelines:

1. All workshops had to be co-delivered by at least three presenters with at least three disciplines represented;
2. The length of any presentation was 20 minutes with presenters asked to build in 10 minutes question time and at least 30 minutes worth of interactive activities (this can vary depending on the number of presenters);

3. For presenters to pitch content to students from across all schools and across years, in a seminar format rather than a lecture;
4. Each presenter was requested to provide one article/reading for the students; and
5. We encouraged different formats (including discussions over lunch).

The concept behind this method was to employ the interdisciplinary approach that we were advocating to students. In other words, there is no point in talking about inter-disciplinarity and creativity if we do not demonstrate it. This approach intersects with other Citizen Scholar dimensions, for it encourages *creativity*, *critical thinking* and *working across teams* and demands that students quickly adapt to different environments within each workshop.

The initial programme is a suite of eight subjects – which we will briefly outline – though only six reflected this format. The other two, *Internship and Community Engagement* (ICE) and *Innovation Hub*, were designed as 'floating subjects': to be presented in such a way that they can be taken at any time over the year. We explain the reasoning behind this in more detail below.

The six subjects delivered in the three-hour seminar format fall into three broad categories that reflect the broader proficiencies of the Citizen Scholar as outlined in the Introduction to this book. These subjects are:

1. Leadership and ethics

   (a) Leadership in a complex world
       The focus here is the leadership of groups and teams in a cross-disciplinary environment, and its application in different contexts. The unit encourages the examination of leadership through the lens of multiple disciplines thereby broadening perspectives of leadership and inspiring students to think and act outside the silos of their disciplines. Students are challenged to think about preparing for unknown futures and the nature of the skill sets necessary to prepare for and respond to change and innovation.
   (b) Ethical leadership
       This unit introduces students to major ethical theories, challenges and concepts in a cross-disciplinary environment. While many students would have completed a disciplinary-based ethics subject, this unit brings students from across the schools to engage

in critical and applied ethical thinking and decision-making. Students are required to identify, distinguish and apply ethical theory and practice, to discuss and reflect on cross-disciplinary challenges such as medical experiments, business decision-making and private/public freedoms to development and justice. Students are challenged by illustrative exercises which require them to apply ethical concepts to their personal journeys as both citizen scholars and future professionals.

2. Critical thinking and reflection:

   (a) Introduction to critical thinking
       This unit provides students with an opportunity to understand and develop high-level critical thinking skills which are essential for success across occupations, now and in the future. Students engage with theoretical frameworks and concepts using an interdisciplinary approach, inspiring students to think and act outside the silos of their disciplines. Throughout the unit, students are invited to consider how they think as opposed to how they think they think (biases and heuristics). They also develop an understanding of the importance of critical thinking and ways to suppress the tendency to rationalise.

   (b) Logic, rhetoric and argumentation
       Building on 'Introduction to Critical Thinking', this unit provides students with a detailed understanding of logical and rhetorical arguments in order to prepare them for leadership roles in the future. Throughout the unit, students appraise the structure of logical and rhetorical arguments, evaluate classical arguments and critique and assess the structure, validity and soundness of philosophical arguments.

3. Creativity and design:

   (a) Research stories
       In a time with too much data, this unit prepares students with the research skills needed for the careers of tomorrow. Students learn about different approaches to research, the research process, its theoretical underpinnings, ethical questions, research design and methodologies, and data collection and analysis. Students are challenged by the complexity of research, learning from mistakes and finding solutions to real-world problems.

   (b) Creativity, innovation and design
       The aim of this cross-disciplinary unit is to encourage students to explore their creative potential and broaden their perspectives

of innovation through the lens of 'design thinking'. Students examine critical factors that influence and shape patterns of creative thinking, and the innovation skills necessary to generate probable solutions to real-life challenges. Students are exposed to new understandings of 'design thinking' methodologies and apply these to address broader social issues in innovative and creative ways. By applying these skills to a series of case studies (including personal experience), students explore innovative and creative practices in confronting challenges and contextual factors with their peers and their teachers.

As noted, students can also enrol any time in the two floating units, Internship and Community Engagement (ICE) and Innovation Hub. This was a solution to the fact that having established the programme across schools and with community partners, too many opportunities were created and not all, unsurprisingly, could fit into the academic calendar. These included internships that straddled multiple semesters, international immersion experiences and the opportunity for students to develop their own project-based subjects. By establishing clear guidelines on the assessment criteria, we ensured that academic standards and integrity was maintained.

One example is a version of the ICE unit that was co-developed with the international consulting firm PricewaterhouseCoopers (PwC) and involved students being part of the PwC Open Innovation programme.[3] The aim was to provide students with the opportunity to develop professional identity through exposure to a high intensity environment focussed on innovation and social entrepreneurship. The programme began mid-way through the spring semester and carried over into summer semester: enrolling in a subject with such counter-calendar timings was previously not possible.

The programme began with cross-disciplinary teams of students joining a two-day brainstorming session where they were confronted with one of the four challenges including 'Promoting Healthy Lifestyles in Western Sydney' and 'Confronting Congestion'. In those two days, the students worked alongside professional organisations and experts in these fields, prepared a draft solution and delivered it via a five-minute pitch.

The teams that were selected then entered a 12-week blank canvas accelerated innovation programme facilitated by PwC and overseen by academics. The programme involved weekly phone 'work-in-progress' meetings with PwC, the use of online project management software to ensure that we were all connected and kept up to date with student

progress, and monthly face-to-face updates with all involved in the programme.

Finally, we describe the assessment regime we put in place. At the beginning of the subject, each student was asked to write down the final mark they wanted to achieve. Most wrote a mark above 90%, but some aimed much lower. The academic involved then discussed their aspirations individually with the students. A concerning point was that the women tended to set their aspirations lower than male students. We then reviewed our own aspirations to design the kind of intervention that might see the aspirations of those lower-expectation students expanded.

The assessment structure was as follows:

  i. A group mark for the final project (based on the processes followed and the outcome): 50%
 ii. An individual mark assigned by PwC in discussion with the supervising academic: 20%
iii. A requirement for the student to reflect on the results assigned to them in (ii): 30%. This final criterion required students to reflect on their performance – building in the opportunity for a discussion on how they performed. One professional aim here was to promote emotional intelligence and resilience in receiving and responding to feedback.

The students reacted positively, with each group delivering impressive and innovative solutions. Impressively, students opted in to the extent of 100% attendance, even though attendance was not compulsory. Feedback was overwhelmingly positive. One student even described the experience as 'the best thing I have done across my double degree'.

Conclusion

The aim of this chapter is to provide an overview of the University of Western Sydney's programme of The Academy. The Academy was established with a strong intellectual base, robust historical foundation in the Socratic ideal and twenty-first century vision of an 'ideal' graduate: that is, a Citizen Scholar who is academically accomplished and civically minded.

At the beginning of the journey, many colleagues – both inside and outside our institution – where sceptical of what some saw as being overly ambitious or, more cynically, simply a marketing exercise. While

the programme is still in its infancy, the initial results have been encouraging. We have seen a dramatic increase in civic engagement across the student body as well as an expansion of academic aspirations and growth in high-performance students.

In many ways, we see The Academy as only the first step in developing a broader programme that meets our objectives across the student body. We agree with those critics that it is an ambitious project – but one worth pursuing – and one that is already delivering positive results. From an institutional perspective, no innovation is completely free of some necessary marketing: new ideas must be 'sold'. Yet, The Academy has allowed UWS to position itself as an innovative higher education provider, and one that is not simply based on glossy brochures, but on a unique programme that reflects the aspiration of the Citizen Scholar.

Notes

1. *University of Western Sydney Act 1988* (NSW).
2. This was sourced from the papers of the Academic Senate of the University of Western Sydney, June 2013.
3. The authors would like to acknowledge the efforts of a number of PwC Australia employees – particularly Duncan Stone – manager of the Open Innovation Program.

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5

Cultural Humility in Education and Work: A Valuable Approach for Teachers, Learners and Professionals

Milton Nomikoudis and Matthew Starr

Introduction

The continuing internationalisation of universities in the twenty-first century, in terms of both their curricula and virtual and physical expansion, coupled with increasingly globalised economies, places the intercultural nature of learning, teaching and professional practice in sharp focus. While there is a significant body of literature attributed to an understanding of intercultural skills and their use in educational contexts, another area of cultural knowledge has not been discussed or examined in any significant degree in the field of education. This area is 'cultural humility'– a topic and a practice most frequently and best discussed in the academic literature of the health-related and medical disciplines (Tervalon and Murray-Garcia, 1998; Schuessler et al., 2012; Alms, 2014; Gallardo, 2014). Professor James Arvanitakis introduced the concept of *cultural humility* to us in the context of higher education teaching and learning (Arvanitakis, 2014).

This chapter explores the possibilities of applying *cultural humility* within a university context, at both a conceptual and practical level. We have come together as authors through our relationship as colleagues at the same university: a non-Indigenous educator and an Indigenous student support specialist, working together to educate each other about more culturally inclusive ways to learn, to teach and to practise professionally. This has included drawing on our experiences working in Indigenous fields to highlight how the application of *cultural humility* in the education space is a valuable approach for

developing appropriate, sensitive and respectful approaches to working cross-culturally.

This collaborative and collegial exploration has also evolved into an elective on cultural inclusiveness that we facilitate for academic staff new to contracts at the university, and from these combined experiences comes the chapter we have penned.

We discuss *cultural humility* as a guiding principle for teachers seeking to facilitate culturally appropriate learning and as an effective approach for ethical and sensitive communication in diverse and constantly evolving learning and professional settings. In relation to its integration into professional teaching practice and the learning of students, we discuss our experiences of applying the concept in a recent short course facilitated for academics from a variety of discipline areas.

The concept is also important within the broader theme of this text: the Citizen Scholar. In a time of increasing globalisation, cross-cultural teams, the appreciation of multicultural environments and the celebration of Indigenous knowledge, we see this as a fundamental skill for university education. The Citizen Scholar should be able to navigate the complexities of different cultural contexts in a way that promotes excellence and harmony.

Three important points should be made at the outset about the application of learning regarding *cultural humility*. First, although we mainly discuss the topic in the context of university education, we believe it is a concept that could also be taught from the outset of the education journey. In this way, we hope that the discussion and practical activities we offer in relation to its development by individuals and groups could be modified to varying learning contexts.

Second, we are not putting ourselves forward as experts in the practice of *cultural humility*. Indeed, we think this would be against the principle of the concept, which requires the individual to maintain a constant state as both learner and self-reflective practitioner. We are advocates of the concept, attempting to practice it in our professional and personal lives, and seek to share our thoughts and practices as those before us did to build our knowledge.

Third, we offer our views and experience of learning and teaching about *cultural humility* as a guide for building both staff and student capability. Our philosophy on education is that teachers should develop the requisite knowledge, insights and skills about subject matter before attempting to teach it to a student cohort. So we write this chapter as a guide for both teacher and student learning.

Why *cultural humility*?

> Culture does not determine behaviour, but rather affords group members a repertoire of ideas and possible actions, providing the framework through which they understand themselves, their environment, and their experiences…Culture is ever changing and always being revised within the dynamic context of its enactment…Individuals choose between various cultural options, and in our multicultural society, many times choose widely between the options offered by a variety of cultural traditions. It is not possible to predict the beliefs and behaviours of individuals based on their race, ethnicity, or national origin.
>
> (Are You Practicing Cultural Humility? 2015)

This explanation of culture talks about its dynamic characteristics by describing it as a 'repertoire of ideas' that individuals select to create their own unique understanding of themselves and their world. Most, if not all of us, move between 'various cultural options' at any given time throughout the day with very little thought about the process.

The culture(s) we identify with may vary markedly from those of the workplaces, communities and special interest groups in which we are active. We are shaped not only by our racial background and ethnicity but also by our nationality, socio-economic background, age, experiences, physical ability, gender, language, religion, politics, education, sexual orientation and more – the dimensions of diversity are numerous (Thomas and May, 2010).

In this chapter, we are advocates for *cultural humility* as a guiding concept for ethical and effective intercultural practice. *Cultural humility* is composed of three main components that were shaped by the earlier work of Tervalon and Murray-Garcia (1998). The first is a lifelong commitment to self-evaluation and self-critique. This speaks to the notion that there is no finish line or ability to acquire 'competence', as one is always in a state of lifelong learning.

The second component is a desire to address and change power imbalances between worker and client – or the teacher–student relationship in education. This recognises that both parties have valid knowledge and contributions to make. For example, in a medical setting the doctor applies the skills and knowledge of their profession, but the patient brings knowledge unknown to the doctor, which includes their personal experience of the medical issue and what may have contributed

to it. Both must contribute their knowledge, and work collaboratively to achieve the best outcomes (Tervalon and Murray-Garcia, 1998).

The final component of *cultural humility* focuses on the development of partnerships with people and groups who advocate for others. Change can occur through individual commitment, but institutions must also participate in self-critique and self-evaluation to produce systemic change.

Cultural humility is able to equip educators in the same way that it has improved the interactions between health practitioners and clients (Har-Gil, 2010; Hilliard, 2011). It is a sophisticated yet simple response to the complexity that cultural diversity poses, and an extension of its better known culture-based training counterparts, cultural awareness and cultural competency. There are distinct differences between the three approaches. It is to this difference we turn to next.

Cultural competence and *cultural humility*

One of the most common forms of professional development offered to staff to enhance their intercultural skills and understanding is cultural awareness, which can be defined as developing

> an understanding of how a person's culture may inform their values, behaviour, beliefs and basic assumptions. Cultural awareness recognises that we are all shaped by our cultural background, which influences how we interpret the world around us, perceive ourselves and relate to other people.
>
> (Cultural Awareness, 2015)

The key to cultural awareness, and its fundamental flaw in our eyes, is its focus on an understanding of the 'other'. While this definition and this form of training rightly states that we are all shaped by our cultural backgrounds, it fails to recognise that any understanding we try to form about another person's values and behaviour is fundamentally influenced by our own belief and value systems. These systems in turn have been shaped by myriad factors within the family and societal structures we have known, forming our socialisation, education and life experiences.

Cultural competence, which we have identified as a conceptual advance on cultural awareness, comprises essential elements that include

valuing diversity, developing cultural self-awareness, appreciating the dynamics of cross-cultural interactions, being knowledgeable about within-group cultural differences, and demonstrating an ability to develop service delivery that is relevant and responsive to the diverse and complex needs of the individuals, families, social networks, and communities.

(Ortega and Coulborn Faller, 2011: 28)

Although Betancourt et al. (2003) identify *cultural humility* – along with cultural sensitivity, responsiveness and effectiveness – as an 'aspect' of cultural competence, we believe *cultural humility* to be the more unifying concept, and less problematic than cultural competence.

Cultural humility can effectively be used as the foundation from which to build shared understandings of inclusive, ethical and appropriate values and behaviours at every level of an organisation – and it is for this reason that we believe it forms a fundamental characteristic of the Citizen Scholar. A major advantage that it holds over cultural competence is that it does not identify an end point for learning. Rather, it is identified as

a commitment and active engagement in a lifelong process that individuals enter into on an ongoing basis . . . It is a process that requires humility as individuals continually engage in self-reflection and self-critique as lifelong learners and reflective practitioners.

(Tervalon and Murray-Garcia, 1998: 118)

The challenge, however, is to embed this in our students' learning. If we are educating students to work constructively within disrupted contexts, we must develop within them the ability to reflect on, question, re-frame and re-activate their learning to move with constantly changing environments (physical and virtual), constantly evolving thinking, and constantly developing approaches to learning and work.

The unifying, highly reflexive concept of *cultural humility* also has one other important advantage over cultural competence. The latter, through its implied philosophy of mastery, also, by default, claims a type of ownership over its subject. To be culturally competent hinges on the assumption that you have grasped what it is to culturally be the 'other' (your student, workmate) adequately enough to be able to work with them in an appropriate and effective manner.

But how can this work when culture is such a dynamic, interchange-able, personalised, multifaceted, evolving and subjective phenomenon?

Cultural humility appeals to us as both a framework and approach for reflective practice and learning precisely because it recognises that mastery is not possible; that people and situations change constantly, and that learning must be reflexive and ongoing.

Cultural humility applied in an education setting

We believe the lens through which educators build a course, and an understanding of the world is permanently fitted with the filter of subjectivity. It is a necessary act of the teaching process that decisions need to be made about what material to cover – that which really matters – and what material to leave out; how to approach a topic and how not to; how learning outcomes should be achieved, and how they should not.

Like everyone else, we as educators are shaped by our cultural experiences, views and assumptions. In an educational context, the culture of the educator matters as much as that of their students – as such, we cannot escape culture in education. While culture is only one aspect of the dimensions of diversity (Thomas and May, 2010), it is everywhere as a context for our teaching and the learning of our students. Everything we teach and everything we learn is culturally bound.

For example, if we look to the Australian university context of cultural awareness training as a mechanism for better understanding Indigenous education and broader Indigenous issues, our joint experience is of a familiar pattern formed by facilitators in their approach to the content and delivery of the training. The most common foundation for this type of training is the delivery of a historical perspective on Australian Indigenous peoples and changes to their societies: for example, an overview of a 60,000 year sophisticated civilisation(s) interrupted violently by almost 230 years of Western colonial possession and rule.

This historical perspective is crucial to any discussion and understanding of the relationships between Indigenous and non-Indigenous people in Australia, past and present. However, all too often in cultural awareness and cultural competence training, the story takes precedence over what should be equally important and pertinent points for discussion, investigation and action. What we are saying here is that frequently the story of colonisation and its consequences is told, but not unpacked further to make it relevant to the present, and to the training participants' lives and work and outlooks. The story is central, but it also needs to be transformative.

For example, out of this often brutal and tragic historical tale of violent colonisation (Reynolds, 2006) – a colonisation that could be argued

to this current day is the greatest influence on divisions of wealth, political power, health and education in Australian society – we need to ask key questions of participants in cultural education to make their learning active, reflective and accountable: something we cover in Learning Activity 2 (see below).

So what does *cultural humility* mean in a learning or other work environment? How can you practice *cultural humility* as a teacher and learn it as a student? What we are suggesting in this chapter is neither prescriptive nor a panacea; in the spirit of the term, we too are on a lifelong trajectory to make *cultural humility* a consistent part of our work interactions and our thinking.

The following case study provides an illustration of how a poorly managed learning activity – one ideally requiring sensitive intercultural understanding and *cultural humility* on the teacher's part – can lead to student feelings of confusion, guilt, anger, tension and hurt when left unresolved. We describe the scenario (which did occur) before deconstructing it to discuss where the teaching failed and how this situation might be avoided.

An Indigenous university student from Darwin in northern Australia enrolled at a university in Melbourne, the capital of the southern state of Victoria, and decided to study an elective on Indigenous perspectives. She thought it would be a good way of becoming more familiar with the Indigenous culture and issues of the city in which she was studying. While she found the learning experience worthwhile, she did describe her one moment of great awkwardness and embarrassment experienced during a lecture. A non-Indigenous academic was delivering a lecture on the Stolen Generations (the forceful removal by government authorities of Aboriginal children from their families, a practice that was widespread between the late nineteenth century and the end of the 1960s (Manne, 1998)). The student reported that the lecture was of high quality until the moment that the lecturer decided to single her out in a crowded lecture theatre – asking her to share her feelings and personal perspective on the Stolen Generations as she was, as far as the teacher knew, the only Indigenous student in the course.

The fact that a non-Indigenous teacher was asking an Indigenous student to express an opinion on one of the most painful episodes in Indigenous history is worth exploring. Here was a highly experienced and respected professor of his discipline, noted for his work and passion for social justice issues, unaware of the risks he was posing to the student in confronting her, and oblivious to the inappropriateness of his actions in both pedagogical and cultural contexts. We can easily assume

the reason the teacher asked the student the question: let us find out from an Indigenous person about an Indigenous issue; the chances are they will probably have more insight than non-Indigenous people. The teacher had good intentions, but there were unintended consequences about the way he went about it.

In a rapidly changing globalised education system and economy, the Citizen Scholar needs to develop appropriate interdisciplinary cultural practices to sit with her or his disciplinary knowledge. This process can be aided by introducing cultural humility into our thinking; to begin with, by asking ourselves the following questions before asking questions of others:

- Is it necessary for me to ask a personal or culture-related question to a student, colleague or workmate?
- Would I be comfortable if this question was asked of me, and would I be willing to divulge this information?
- Is the question relevant to what I need to know to fulfil the requirements of my position?
- Might I be offending, or prying into someone's life by asking the question?
- Do I have a sufficiently familiar and trusting relationship with the person to feel confident that the question will not offend or make them feel uncomfortable?
- What is the intended purpose of my query?
- How can I ask my question in a way that builds mutual understanding?

As a footnote to this short case study, it is important to note that in all intercultural interactions as we try and navigate diversity, mistakes can and will occur even if it is not our intention. It is vital for us as educators and for our students to acknowledge that making mistakes, and then identifying them and adapting our thinking and practice for a better outcome, is a key element in the process of learning.

The importance of knowing and not knowing

As a teacher, an academic and/or researcher, the educationalist's role and identity is built around the premise of 'knowing' and using what is known to create new knowledge. Our whole systems of education, from pre-school to postgraduate study, are built around the notion of knowledge creation and application. It is reasonable to ask then how making

mistakes can be something that is important (rather than at times just unavoidable), and what do mistakes have to do with education and the cultural context of teaching?

Many of us struggle with the idea of appearing incompetent, and there is a level of discomfort felt by individuals when they have to admit they do not know something. This is no less true when it comes to developing and practising *cultural humility*. However, practising humility when interacting with individuals who have various cultural identities helps us to respond appropriately and sensitively because of the very fact that we are acknowledging that there is much more unknown about them than is known. It is helpful particularly for students to understand that not knowing does not equate to a lack of intelligence or aptitude. A key component in embracing the concept and practice of *cultural humility* is the understanding that making mistakes does not equate to incompetence. Approaching situations with this mindset allows educators and students alike to be more open minded about learning, without the constraints or pressure of feeling like they should never get anything wrong.

This takes us to another dimension of the Citizen Scholar – the concept of *mistakability*, or having the emotional intelligence and reflective ability to learn from one's mistakes.

Even though the outcome of the case study discussed earlier was not ideal (the discomfort and embarrassment of the Indigenous student), *cultural humility* can always be applied to improve future interactions by engaging in self-reflection and self-critique. This would help the educator to identify issues and approaches that might cause potential offence and/or alienation of students. Out of a mistake comes an opportunity to change, learn and modify one's practice.

There are a number of benefits in incorporating multiple cultural perspectives into the classroom, including to inform discussion, to offer alternative ways of viewing the world and to use group learning and collaboration to build shared meanings. Rather than seeing this as a challenge that is fraught with complexity and the danger of making mistakes, it should be viewed as an opportunity to engage students by making them feel like they all have a place in the learning setting and that their opinions are respected.

Two learning activities

In this section, we turn to two learning activities that we believe assist in building *cultural humility*. We will preface them by stating that we

believe education works best when: (a) it is neither rushed nor over-whelming; and (b) is carefully planned and scaffolded. These activities are designed to make educators and students more cognisant of how we are all shaped by our cultural influences. They highlight the ubiquitous presence of cultural influence in our educational and other workplaces, and the importance of responding to these forces in appropriate and positive ways. We also encourage that educators adapting them modify and use them as appropriate.

Learning activity 1: Breaking down stereotypes

Stereotypes are commonly held beliefs, assumptions or oversimplifications about groups or types of people (Arvanitakis, 2009). We all learn stereotypes about gender, race, class, ethnicity, religion and age from the media, our peers and social groups, and our families. Stereotypes can make it difficult to see people as individuals. Some stereotypes, both positive and negative, are translated into expectations from parents/guardians, teachers, friends and society as a whole. Others are internalised by the target of the stereotype (Arvanitakis, 2009).

Teaching students about the origins of stereotypes, how to think about them critically and the importance of seeing people as individuals helps to break down cultural bias and the negative power structures it can spawn.

The following activity on stereotypes was developed and applied at the University of Western Sydney by Professor James Arvanitakis, who wanted, through the use of a simple activity, to demonstrate to students how inaccurately we can perceive others based on the negative stereotypes we have about them. He did this by having students participate in the following steps:

Step 1: All students are asked to write down their full name. Under their name, students write down the ethnicity with which they identify: Australian, Greek-Australian, Aboriginal and/or Torres Strait Islander and so on.

Step 2: All students then write down five familiar stereotypes about their own cultural backgrounds. These do not have to be true or accurate. They can be outrageous and even offensive – as long as the students are writing about themselves.

Step 3: The students are asked to circle the stereotypes that are true.

Step 4: The entire class stands up.

Step 5: The teacher asks the students to sit down if *none* of the stereotypes apply to them.

Step 6: The teacher asks the students to sit down if only one of the stereotypes apply to them. Then to sit down if only two of the stereotypes apply to them. This continues through three, four and finally five stereotypes.

(In our conversations with Professor Arvanitakis and having witnessed this delivered in multiple keynote presentations with literally hundreds of participants, very few students have been left standing.)

Step 7: The teacher explains that this activity demonstrates that stereotypes are largely inaccurate when used in the labelling of individuals and groups from particular cultural backgrounds. It is pointed out that if the majority of people participating in the activity found that the stereotypes did not apply to them, logically this would also be the case more broadly, and that we should always question the assumptions we have about a group of people and how we act towards them.

Step 8: After this activity, the teacher leads into a deeper discussion about the multiple dimensions of culture and the many misconceptions that exist.

Part of the value of this activity is that it can be used with all cohort sizes, and for large classes such as those in a lecture theatre, it promotes an active way of learning and a visually effective medium for conveying the message of the inaccuracy of stereotypes.

Learning activity 2: My cultural identity

Cultural humility involves a deep and consistent level of self-critique and reflexive practice. This separates it from cultural awareness and cultural competence, which does not require the participant to self-analyse to any significant degree. *Cultural humility* includes the recognition of the lack of accountability that can come with positions of privilege and power (Ortega and Coulborn Faller, 2011: 30).

Gorski (2006; 2008) argues that if there is no resolve to change existing societal inequities through intercultural education, then all that will be achieved is the maintenance of clearly unjust social systems. The following learning activity, adapted from the Wayi-Erwer student resource developed by the Oodgeroo Unit at Queensland University of Technology (2000), has been included as a means to become more aware of our individual levels of power and privilege, to investigate how we came to be in our current position and what shapes our beliefs and values. It focuses on our positions in relation to the colonisation of Australia,

our attitudes and responsibilities to the first Australians and delves into how we culturally identify ourselves.

The questions we can ask ourselves and students might include the following:

1. *What is your family's position in relation to the colonisation of Australia?*

   • Were your family original inhabitants of Australia, or, if not, when did they come to Australia and why did they come?
   • What attitudes towards Indigenous people did you grow up with in your family, school and friendship circles?
   • What attitudes about Australia and its identity, ownership and character did you grow up with?

2. *What is your position in relation to the colonisation of Australia?*

   • Were your formative opinions about Indigenous people shaped by your family, school and friendship circles? Were there other influences?
   • What is your current position in regard to the relationship between Indigenous and non-Indigenous Australia?
   • If your position has changed, why has it? If it has not changed, why is that so?
   • If you agree that Indigenous people were dispossessed of their land through colonisation by the British, then do you have a responsibility to recognise the dispossession as a citizen of modern Australia, and what action(s) should/do you take?

3. *How do you culturally identify yourself?*

   • What is your culture(s)?
   • Why do you identify in this way(s) and not others?
   • Is cultural identification necessary and useful to you, and if so how?

As educators, this activity reminds us of the values, beliefs, assumptions and biases that we bring to our teaching. If we are to assist in the development of ethical Citizen Scholars, we must educate our students to be cognisant of, and accountable for, the social inequities and injustices that may exist in any setting – be it educational, geographical, commercial or community. In addition to outlining issues of privilege and power, this activity can be used to scaffold learning about ethical professional and cultural practice. In this particular context, it also is an

exercise in the realisation of the privilege that comes with the colonisation of first peoples (Howard, 1995) – and again can be modified to fit a particular cultural/learning context.

Cultural humility in practice

In the first half of 2014, we jointly facilitated a ten-hour course entitled, 'Cultural Inclusiveness', which was part of a university teacher training programme designed to enhance the practices of new academics at our university. Some of our teaching strategies and activities worked and some did not. While in an ideal world we would want everything to work perfectly, we are comfortable with making mistakes. In this way, we modelled the behaviour of *cultural humility* as we were willing to make mistakes as we entered into fresh and contested territory with our teaching colleagues. We adopted a flipped classroom approach (Bergmann and Sams, 2012) offering our participants choices in both the medium (academic article, website, video) and the content of materials to introduce them to key concepts that would be used in the workshops.

The academic articles available to them included the Tervalon and Murray-Garcia article (1998) on *cultural humility* and the Gorski article (2008) on decolonising intercultural education. There were also materials that covered topics such as inclusion and exclusion, unconscious bias and the conscious development of multiple perspectives in curriculum. We found that this approach worked well, with participants choosing the materials that most interested them, and then feeding their responses into the workshop conversation. Another part of our approach was to model a high level of personal self-reflection through our facilitation of the discussions, frequently referring to our own learning and teaching experiences and our continuing efforts to build ethical and effective cultural practices into our work.

In relation to assessment, we asked our colleagues to reflect on their current teaching practices and to suggest changes to their approaches based on their learning in the course. We tried to model inclusive practice by offering them a choice in assessment form to cater to their work priorities and learning/teaching strengths. Like the Citizen Scholar that we desire our students to become, we were seeking to encourage our colleagues to reflect on how their teaching could be both more inclusive and more culturally appropriate and relevant.

The submitted assessment illustrated to us that *cultural humility* can be effective in transforming practice. All participants exhibited a highly reflective and improved approach to their teaching and curriculum, with

examples including: reassessing the nature of an international design studio to an Asian country by exploring the colonising aspects and inherent Western biases operating within the teaching and learning; modifying a law curriculum to embed *cultural humility* and to encourage a more inclusive approach to learning and to inclusive professional practice; and building into the curriculum an understanding of the need for *cultural humility* in relation to professional interventions to conduct scientific testing in remote Indigenous communities.

Conclusion

The editors and contributors of this book argue that a new set of proficiencies and attributes are required by university graduates in order to navigate a future that will be characterised by ongoing disruption and constant change, and global interactions and cross-cultural experiences. Our challenge as educators in preparation for this future is to adapt our teaching to meet this constant change and to equip our students with the proficiencies and attributes that will allow them to successfully respond to rapid change as professionals and citizens. To fail in this challenge, not only will our students lack the skills to cope and succeed in their professional lives but, on a much larger scale, universities might well lack the relevance and the new knowledge required to be rendered anything but redundant as a major source of education for future generations.

Our discussion of *cultural humility*, and its importance in teaching, learning and professional contexts, aligns itself with the argument for the development of new proficiencies and attributes to complement *interdisciplinary learning*. Specifically, we see *cultural humility* contributing to proficiencies about the building of resilience (and its attributes of *adaptability* and *mistakability*), working across teams (with its attributes of *cross-cultural understanding*, *internationalisation* and *inclusivity*), and design thinking (with its attribute of *ethical leadership*).

The questions we have posed and the activities we have included for consideration by educators and students alike are designed to nurture a greater awareness of our own cultural positions and the power structures and biases that are inherent in all educational and professional environments. It is hoped that this greater self-awareness will translate to fairer and more effective and genuine collaborative approaches to learning and professional practice.

In an increasingly globalised society, where multiple cultures and cultural perspectives mesh in the production of new services, products and

knowledge, we need to eradicate dominant cultural thinking and replace it with highly adaptive and collaborative thinking, design and production. We are admirers and advocates of Gorski's (2006; 2008) arguments for the necessity of institutional change for a more just society and support *cultural humility* in part because of its adaptability and relevance to the institutional context.

We need to develop more institutions with the appropriate ethics and *cultural humility* required to create curriculum and practices that are locally relevant and that explicitly support inclusion and social justice goals. The Citizen Scholar cannot be nurtured in a university that is anchored in colonial thinking and that is not accountable for its cultural practices.

Finally, we believe that good learning and teaching – and our ability to cope and to change effectively and appropriately in rapidly evolving work environments – is enhanced when we bring our genuine and *present* selves to the task at hand. When we use the term *present* we mean not only the ability to focus on the moment, but to do so in a way in which we are constantly aware of the factors that will influence our perceptions, opinions, decisions and actions. Among these factors are our inbuilt values, beliefs, assumptions and views built on our lived experiences, as well as our relative authority, confidence, skill and knowledge (or lack of) in any given situation.

As stated earlier in the chapter, cultural humility is not a panacea, but rather an effective approach with which to guide one's teaching, learning and professional practice. It challenges individuals to eradicate colonial thinking and to expose and correct institutional inequalities. We see the ongoing critique of our own thinking, and the adaptive transformation of our practice, as significant and necessary abilities to possess in a world where diversity and intercultural understanding can collide and collapse if not negotiated with equity, respect and a genuinely collaborative spirit.

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Giving Voice to the Citizen Scholar: Generating Critical Thinking by Combining Traditional and Non-Traditional Genres in a First-Year English Course

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Introduction

In South Africa, students come to university from a variety of different cultural and linguistic backgrounds. Often, English is not a first language, and students experience challenges when entering an English academic setting. This chapter explores the issue and describes how we adapted our first-year course to enable our multilingual and multicultural students cross the boundaries between home, school and university. By doing so, we reinforced various graduate attributes associated with the Citizen Scholar outlined by Arvanitakis and Hornsby in this book.

The course we discuss focuses on Sociolinguistics in a first-year English course as part of a Bachelor of Education degree at Wits University in Johannesburg, South Africa. These students are all majoring in English and will teach English as a language of instruction and as a school subject. In this course, there are a number of attributes we would like to develop in our students. As teachers who will have to work in *diverse teams* (proficiency cluster 3), developing understandings of cross-cultural relationships, inclusivity, and new literacies[1] are key attributes. In addition, there is a need for *creativity* and *innovation* (proficiency cluster 1) that enables *critical thinking*, an ability to *adapt* and *sensitivity* to context.

Our students will confront complex, diverse classroom contexts where race, class, language, gender and culture collide and will have to work in

an education system that is under severe strain. Given the historical context of South Africa where language was used divisively, today's language teachers need to challenge normative notions of standard languages and know how power relations are embedded in language. In addition, there is a need to challenge understandings of language that reduce it to technicist grammar teaching (Myhill, 2005), and position language as inferior to the literary canon in English curricula.

In critical discussions of and reflections on previous iterations of the course, we realised that the use of reflective narratives to assess students' work, although powerful and generative, did not always enable enough critical distance in student writing. Dominant discourses and stereotypes around language, race and gender that the course aimed to problematise were often unconsciously reinforced in the writing. This showed us that we had not been entirely successful in fostering *critical thinking*, *inclusivity*, *cross-cultural understanding* and *cultural humility*. The course was reconstituted and new assignments set. We present an overview of the course and analyse one of the assignments in order to explore the ways in which students were able to move beyond the constraints of reflective writing as a genre.

Briefly, the assignment required students to draw on their linguistic repertoires to explore sociolinguistic concepts by writing a dialogue in a language variety they knew. Students then analysed their dialogues in an accompanying commentary. The samples of students' writing show the ways in which they critically explored issues of language and gender, language and place, language and power and understood language as an embodied practice. We argue that aligning the type of academic assignment (a non-traditional dialogue with a critical commentary) with the heteroglossic pedagogy we had deliberately used to underpin the course, opened up a productive space where students could connect disciplinary concepts with their lived experiences. In addition, this pedagogical approach which foregrounded students' strengths was an enabling factor that allowed them not just to display disciplinary knowledge, but to write back to socially unjust practices.

A heteroglossic pedagogy

According to Doeke et al. (2004) in the current climate of teacher education, writing tasks are frequently about knowledge display and the reproduction of dominant knowledge. In addition, students are expected to show ownership of their texts by writing with a distinctive voice. These concepts are loaded with contradictions and ambiguity.

From a student perspective, academic writing is often more about jumping through hoops than engaging with ideas. Compliance is favoured over creative risk-taking thus silencing student voices (Thesen and Cooper, 2014).

We take up Doeke et al.'s (2004) suggestion that there needs to be a move away from textual practices usually associated with academic writing. They make a strong case for reconceptualising students' writing as a space for 'heteroglossia' (Bakhtin, 1981): that is, the play of conflicting voices. By making this move, learning is conceptualised 'as a struggle over power and meaning, rather than as a steady progress towards the attainment of certain graduate attributes or professional standards' (Doeke et al., 2004: 31). While we agree that there is a tendency for certain graduate attributes to be part of technicist, managerialist discourses, the graduate attributes we work with are important ways of being in a world of flux. They require students to recognise and take up multiple identity positions, understand change and have a critical awareness to speak back to dominant forms of knowledge.

Within the field of language studies, there is an increasing recognition that languages are no longer characterised by homogeneity and stability (Blackledge and Creese, 2014; Busch, 2014). Rather there is a proliferation of language varieties. For us, language is

> a set of resources which circulate in unequal ways in social networks and discursive spaces, and whose meaning and values are socially constructed within the constraints of social organisational processes, under specific historical conditions.
>
> (Heller, 2007: 2 in Piller and Takahashi, 2014: 1)

Bakhtin's (1981) notion of heteroglossia is then useful in understanding linguistic practices and linguistic diversity, particularly in South African urban contexts where linguistic diversity is the norm. Heteroglossia explains the ways in which language varieties and non-standard dialects are shaped by historical and political forces.

There has been little work with a focus on heteroglossic practices in education (Busch, 2014). But, heteroglossic practices encourage participation by drawing on students' resources, thus connecting the classroom and social environment. Blackledge and Creese (2014) make a strong argument that language teaching should include a heteroglossic lens when dealing with language practices. The benefit of this is to bring into play 'voices which index students' localities, social histories, circumstances and identities' (2014: 18). In this chapter, we show the

ways in which localities, history, circumstances and identity manifested themselves in the redesigned sociolinguistics course.

We argue that the simple move of placing multiple texts and genres next to each other in the course created a space for discussion about the 'social tensions inherent in language' (Blackledge and Creese, 2014: 7). The meta-language of Sociolinguistics operated as a tool for students to critically analyse their lived experiences.

The Sociolinguistics course

The Sociolinguistics course has been through many iterations since it was launched in 2005. From its inception, the course was a response to specific challenges within the South African higher education context. These challenges tended to shift over time and demanded a level of adaptability and mistakability from us. Each change has brought losses, gains and possibilities. In many ways, the dynamic nature of language, especially in superdiverse South African contexts, lends itself to reinvention and innovation.

A non-negotiable thread throughout each version of the course has been the foregrounding of linguistic diversity. This includes the explicit valuing of the personal, and the teaching of sociolinguistic concepts in relation to critically reflexive narratives of lived experiences – both the students' experiences and those of published authors.

In its first iteration (2005–2009), the course was an attempt to engage students from vastly diverse backgrounds in terms of language, culture, geographical location, class, race and level of preparedness (Mendelowitz and Ferreira, 2007). We responded to a situation where

> our lectures and tutorials seemed to consist of different worlds within worlds with minimal points of connection. On the whole, many of our previous attempts to address these challenges had inadvertently thrown the spotlight on disparities and disconnections within the group.
>
> (2007: 490)

In these years, English was compulsory for all Bachelor of Education first years (which meant that students with no interest in teaching English as subject sat alongside English specialisation students).

The students were required to produce a personal language biography where they reflected on their linguistic identities, entering into conversation with other published and previous students' narratives they had

been provided with. In the first phase (2005–2009), this student language biography gained more prominence as we came to realise how generative it was as a tool for consolidating student learning, thinking and reflection (Ferreira and Mendelowitz, 2009a; 2009b).

Reflection on affective aspects of experience is an essential step in the movement towards critical analysis. However, we noted that although frequently it was students' strong affective engagement that made the language narratives powerful and compelling, the deep level of engagement also had certain drawbacks. Sometimes students became overwhelmed by the emotional dimension of their memories/experiences and this interfered with their capacity for critical analysis (Ferreira and Mendelowitz, 2009b: 57).

One of the limits of reflection is that it can be hard to get beyond oneself. That is, reflection is a powerful tool for enabling students to revalue their language varieties and for some critical engagement – but it is, fundamentally, an inward journey. Phelps (1991: 887 in Qualley, 1997: 3) defines reflexive inquiry as 'the act of turning back to discover, examine and critique one's claims and assumptions in response to an encounter with another idea, text, person or culture'. So, while reflexive writing can and should generate *critical thinking* (and is not necessarily incompatible with critical distance), in the work with first-year students, there were limits to their attainment of critical distance in the reflexive language biography.

In 2010, due to the changing profile of students taking English, we decided to focus more on an outward journey. English was no longer compulsory and was taken only by prospective English teachers. The Sociolinguistics course had a new role in the overall English curriculum. We developed it from a three-week course to a six-week course thus extending the academic depth and level of challenge. Narrative was still a central element of the course, and we still moved between academic concepts and narratives but the sequencing was different and academic concepts were foregrounded earlier. Whereas previously we had moved from the self outwards, we now started with language attitudes and linguistic prejudices and moved gradually towards language and identity. The narrative assignment was replaced.

The assignment

The new assignment required students to write a dialogue between two or more participants using a youth language variety and to analyse the dialogue using key sociolinguistic concepts (see Figure 6.1).

Section 1: Write a dialogue between two or more participants which illustrates the use of your own youth variety. Your dialogue must be situated in a specific context, and the audience and purpose of the dialogue must be made explicit at the outset.

The dialogue may be written in any language or dialect of your choice (e.g. Tsotsitaal, Afrikaans). However, you must provide translations. If the entire dialogue is written in a language or dialect other than Standard English, the entire text must be translated. If the text is written in Standard English with specific slang words, then a glossary must be provided. Follow the format of Cook's dialogue transcript on page 58 in the reading pack.

Section 2: Analyse the role of your youth variety in this dialogue in relation to the following categories:

- Intended audience
- Context and purpose
- Group membership and expression of specific identities (for example, gender and cultural identities).

Figure 6.1   Assignment brief

The assignment was thus a blend of a creative/non-traditional genre (the dialogue) with a more traditional academic genre (the critical commentary).

While the course as a whole covered topic such as language attitudes and prejudice, language varieties, language, race and gender, the scaffolding for this assignment was embedded in the section on language variety. By language variety, we mean different forms of the same language with a particular focus on non-standard varieties that are shaped by class, race, place and social settings. The conceptual framework for this came from course readings and discussions of a blend of academic and narrative texts including extracts from Barak Obama's 2007 autobiography, Zadie Smith's (2009) 'Speaking in tongues' lecture and Tom Wolfe's (2004) novel, *I am Charlotte Simmons*. We foregrounded issues of language varieties and group membership, the expression of multilingual identities, inclusion and exclusion and questions of voice.

We also moved beyond discussion, which not all students participate in, to the performative. Students were required to do a number of role plays demonstrating the shifting use of language in different contexts. Volunteers presented their role plays to the whole group and these were analysed collaboratively by the lecturers and students. We framed the key issues emerging from each presentation using the relevant sociolinguistic discourses, hence modelling the process of analysing dialogues as preparation for the assignment.

Another important scaffold for the assignment was a class activity where students compiled a South African youth dictionary based on the urban variety of their specific subgroup. This task was not in the original course plan but arose from class discussions about the South African English Oxford Dictionary and the online urban dictionary. This spontaneously emerging task generated one of the most 'teachable moments' of the course where students had an opportunity to identify gaps in the dictionary and to write themselves into it. This became a task about self-representation and dictionary work.

The sample

The samples of student assignments analysed come from one class of 80 students. Fourteen assignments (20%) were analysed, ten were written by female students and four by male students. The assignments chosen for analysis were not based on marks students received but rather on the topics explored in the dialogue.

It is important to note that our focus is not on how well students performed. Rather it is based on what we had noticed in marking the assignments: the range of language varieties used; the ways in which students grappled with new sociolinguistic knowledge, and most importantly for us, the level of criticality displayed in engaging with lived experiences.

We used thematic content analysis to analyse the dialogues. Each dialogue was read and the narrative theme identified and then read against the commentary to establish common concerns. The assignments were then coded in terms of the topics students wrote about; the location of the dialogue; who the participants were; the language variety used; the sociolinguistic concepts that were foregrounded. A close critical reading was then done to trace how issues and experiences were conceptualised and problematised in the critical commentaries.

We begin the analysis section by outlining the topics covered by students and identifying the varieties they used. We then focus on dialogues in depth to illustrate the ways in which locality, history, social circumstances and identity are explored by students (Blackledge and Creese, 2014).

Diverse topics and language varieties

The students' dialogues covered a wide range of topics. Of the 14 assignments, five dealt with making an arrangement with friends (paying back

money owed, arranging a party (2), organising auditions for a church skit and meeting for coffee). Four dealt with sex (the marital affairs of President Zuma and one of his wives, young men discussing a 'promiscuous' girl, the benefits of a sugar daddy and the sexual exploits of a local drug dealer and his pregnant girlfriend). Three dealt with masculinity and/or homophobia (what it means to be a responsible man, going to initiation school and the misidentification of a man as gay). One dealt with conflict with a teacher and another a student's incarceration in police detention cells.

Three interesting aspects to these topics emerge. The first is the combination of the mundane and the taboo. For example, the mundane practice of meeting friends at lunch after lectures resulted in a complex exploration of cultural expectations and double standards around marital fidelity for the president and his wife. The assignment appears to have opened up a space for students to explore sexuality, gender and power in ways that the reflective writing did not always do. These are important parts of human experience but are often silenced in the classroom. The second is the range of characters in the dialogues. Many students wrote themselves in as a character in the dialogues creating an insider perspective. This could then be interrogated from an outsider perspective in the critical commentary. Some dialogues had male and female characters; others had either males or females. Third, and of most interest to us, were the female students who chose to write their dialogues in a male voice (four of the fourteen). We discuss the implications of this choice later.

Students drew on a range of language varieties to write their dialogues. When categorising the varieties, we acknowledge the fraught nature of this classification, especially since little research has been done on language varieties in South Africa. Our categorisation was guided by our students' classification of the language variety they used.

Eight dialogues are written in 'street'/township varieties. Due to apartheid's racial segregation where black people lived in townships, a range of informal language varieties evolved with multilingual characteristics. These are colloquially referred to as street varieties. Three of the dialogues are written in Soweto Tsostitaal (see below), one uses 'Spitori', a Pretoria variety located in townships on the outskirts of the city Pretoria. Three students, who identify as 'Coloured' (mixed race), classified their dialogues along racial lines but the geographical locations (eastern Johannesburg, Johannesburg, and Durban) marked them as different varieties. One student names hers as 'kombuistaal' [kitchen language] which is typically associated with Coloured speakers.

Its origins derive from the 'corrupted' form of Afrikaans that Cape Slaves spoke.

All of these varieties are generally classified as low-status varieties and generally kept out the official curriculum. Bringing non-standard varieties in to the academic space and giving them voice challenges the hegemony of English and the perceived power of standard forms. The final three dialogues were multilingual conversations and characterised more by youth slang than geographically located varieties. These were all located in Johannesburg.

When read as a whole, the linguistic diversity and richness in the assignments is striking. Whilst many first-year students have not mastered the specific language variety required by academic discourses, we were struck by the repertoires students did have: as bi- and multilingual speakers, as proficient codeswitchers, as members of youth subcultures with language as an identity marker, and as subversive and intentional users of language(s).

Unlike the often laboured academic essay, the majority of these assignments were filled with an energy that only speakers who know a variety and use it effortlessly can produce. This assignment opened a space for students to share their linguistic strengths in ways where they had control over how they chose to reveal the identity constructions and practices of the group(s) they wrote about. It is important to note that this writing was not 'gratuitous creativity'. The critical commentary grounded the dialogue enabling students to work from their linguistic strengths and knowledge of the everyday.[2]

Language, identity and place: Tsotsis and Dickie Jeans

An unanticipated aspect that emerged strongly in the assignments was students' sense of place, the relationship between place and identity, and the ways in which places shaped what could and could not be said. Here examples included the intimate and safe space of a kitchen to gossip about the drug dealer and his pregnant girlfriend, and a yard in Nongomo KwaZulu Natal away from adult ears to challenge traditional gender roles where an urban sophisticate introduces the notion of a sugar daddy.

The dialogues and commentaries emphasised this strong sense of place and linguistic identity in a way that more traditional assignment genres do not. When we asked students to explain the context of their dialogue, we assumed this would just include a location. Because the students had to draw on a language variety they knew, the dialogues had to

be located in a particular place. As Gruenewald (2003: 625–627) points out, place is much more than location because places 'hold culture and identity', producing and teaching 'ways of thinking about and being in the world'. We found that many students went beyond the assignment criteria that asked for a description of context and purpose and unpacked the complex interconnections of being, speaking and valuing.

We illustrate these interconnections by presenting Pete's assignment and the ways in which his representations of place become embodied. Pete's dialogue describes his detention in a police cell. He had been commuting without a valid train ticket. In the cell, he meets two friends, Thabo and Steven (referred to affectionately as Stivovo), who are from his neighbourhood, White City Jabavu in Soweto. In the dialogue they talk about the reasons they have been detained and ask if Steven's brother could bail them out, only to discover that he has been incarcerated for armed robbery.

The places mentioned in Pete's dialogue are significant. Jabavu is one of the oldest suburbs in Soweto and was established in 1948 for Zulu and Xhosa speakers. Named after the author and educator Davidson Don Tengo Jabavu, it was known as 'the wild west' throughout the 1960s and 1970s because of its high crime rate (Glaser, 2000). It is not surprising then that the place where the dialogue participants live, which was characterised by violence, powerful gangs and criminality, has shaped their ways of being in the world.

Pete's linguistic choices are shaped by place. The dialogue is written in Tsotsitaal which was coined in Sophiatown in the 1930–1940s and spoken by young urban male criminals (Hurst, 2009: 245). Originally, it had a strong Afrikaans base but over time the variety has shifted and has a stronger isiZulu base (Glaser, 2000). Mesthrie (2008) argues for a Tsotsitaal continuum where on the one side is a secret language characterised by a life of crime and the other an expressive street speech of young people. While this may in fact be the case and appropriate for the other two assignments that use Tsotsitaal as their language varieties, Pete's dialogue contains traces of the original Tsotsitaal with its Afrikaans base and criminal associations:

Enlek, nou wat soek hierso Pete my bra, *e*police station? (*And P my brother what are you doing at the police station?*)
                         [Afrikaans in bold; italics is the locative form in isiZulu]

There is also evidence of a more contemporary Tsotsitaal with an isiZulu base because the speakers are young men:

Tjo **deur** *manje labantu abasibhkeli ngoba mina bangithathe eDube* for *ukubhayisa egadweni.* (*Wow! The security officers are cruel my friend, they caught me in Dube station while selling some snacks inside the Metrorail train.*)

[Afrikaans in bold, isiZulu in italics]

Jabavu's turbulent history is reflected in the use of the original variety of Tsostitaal. Pete acknowledges this in his critical commentary when he states that the intended audience for the dialogue are those who 'still attest to the original connotations of Tsotsitaal' and have lived in Soweto for a 'lengthy period of time'. The gangster lifestyle is thus fittingly reflected in the choice of the dialogue's primary place: the police detention cells. As both the literature (Glaser, 2000; Hurst, 2009) and Pete attest, 'the characters will have backgrounds of prison life and are referred to as a menace to society'. It appears Pete's characters are familiar with their own and family members' incarceration. Pete comments philosophically to his cellmates:

Majimbosi okwenzekile kwenzekile, fede. (*My brother, what has happened was meant to happen, we have to accept it.*)

The ability to use Tsotitaal in prison is a tool for survival. Because of the criminal identity associated with the variety, its speakers are likely to spend time in prison. Therefore as Pete notes:

Anyone held in prison has to prove to have a level of township slang so that he may not fall victim to unscrupulous men in jail.

Survival is linked to a facility with the language that enables one to prove one's 'hood' (manhood). Displays of masculinity are fundamental to being a tsotsi. Masculinity is manifest in the use of this variety that is predominantly used by men (Ruddick et al., 2006; Bembe and Buekes, 2007; Hurst, 2009). It is not only language that enables a man to establish his credentials to gain access to groups and thus safety in prison. Group solidarity and masculinity are also marked by dress. Pete explains how the tsotsi identity is embodied by contemporary youth, shaped by Soweto and Jabavu's history. His tsotsis are:

All Star wearing men, Dickies jeans hanging beneath their butts without having been fastened without a belt and hats being put halfway down the face in order to camouflage identity (sic).

The history of place shapes the complex interplay of language, gender and power that creates this embodied identity that Pete writes about:

> The type of dressing is very important as the language variety does not exist independently from the person's behavior at most times, the manner of dressing and greeting is meant to curb any possibility of having people who do not belong in the group saying and doing what they do not understand.

Whilst Pete explores the ways in which place and language become embodied practices, forming a particular urban youth identity, Olivia works with language as a way of exploring masculinity and power.

Writing back to gender stereotypes: The village bicycle

While some of the female students in the dataset recreate their own voices or a combination of male and female voices, Olivia makes an interesting move in her dialogue where two males (Adam and Diego) discuss a girl who Adam likes. The friend, Diego, informs Adam that he's dated the girl in question (Sumaiya) and that she is promiscuous. This label (whether 'true'or not) is enough to deter Adam. This dialogue and the critical commentary is a fascinating example of a heteroglossic text.

When one begins reading the dialogue, it is not clear if Olivia is simply reproducing naturalised assumptions about gender or if she is problematising the interaction between her two characters. From the outset the subtext of the dialogue clearly is a platform for the enactment of particular version of masculinity in which women are treated as commodities, conquests and prizes in a competition. The dialogue begins:

> A: *Neh, you check, there's this one stekkie I got my eyes on. I got her digits and alles!* (No, you see there is a piece that I am interested in. I have her phone numbers and everything!)
> D: *Yoh, bra! That is now Ayoba! What's her name? Come now! Eh, you want some mineral?* (Wow, brother! That is really good! What is her name? Come on! Hey, do you want some coke?)

The use of the Afrikaans slang word 'stekkie', which translates as 'piece', pejoratively refers to a woman one has casual encounters with. The use of this non-standard language variety plays an important role in constructing masculinity. The use of this variety offers the possibility of performing language and gender roles in ways that would not usually be

facilitated in academic writing. The monolingual habitus of institutions usually silence 'speakers with a complex, translocal repertoire' (Busch, 2014: 21).The young men alternate between solidarity/advice modes, competition – then finally return to solidarity mode. The conversation takes a dramatic turn, when Adam provides his friend with details about the girl – her surname, where she comes from and so on. It emerges that Diego dated the girl and says she is promiscuous.

> D: *Sumaiya? Sumaiya Khan?*
> A: *Ja! You know her mos* (Yes, you know her?)
> D: *Boy, oh boy. Do I know her . . . ?*

The boys begin insulting each other as initially Adam doesn't believe his friend (*'Entjie– bek' [cigarette mouth]; 'kak [shit], man! Voetsekjy [fuck off]!'; 'Bra don't be naar with me [brother don't be angry with me]'; 'You chop [you idiot]'*). Then when Adam realises that Diego is being truthful, he is angry that his chances of a relationship with Sumaiya have been ruined. Implicit in this realisation is the shared understanding that two good friends cannot share girlfriends. The conversation culminates in Diego's declaration:

> D: *You won't want her anyway, she is like a village bicycle there in Actonville* (She is a known whore in the neighbourhood- Actonville).
> A: *For Real, Dudza?* (Is that true, friend?)
> D: *Ya, be happy I told you.*
> A: *Ja, ne? Bro's before Ho's neh?* (Yes, well. Brothers before Girls [whores], no?)

Male solidarity is restored as Adam appears to take Diego's labelling very seriously. He is grateful that he has been spared the embarrassment of dating a girl who has been labelled as a 'bicycle'/ 'whore'/ 'ho'. No evidence or additional detail is required. The dialogue is a powerful illustration of the central role played by language in constituting, performing and policing gender. Male peers frequently use language to police one another (Langa, 2008).

However, what is foregrounded in this interaction is the representation of women as commodities to be won in discursive constructions of masculinity (Langa, 2008). The female under discussion (Sumaiya) is both a source of competition and male solidarity. This interaction highlights the access that young men have to derogatory labels to use as a form of social control. These labels perpetuate asymmetrical gender

relations as women have no equivalent linguistic weapons with which to retaliate (Lees, 1993). The labels work to get women to self-monitor their sexual behaviour, to monitor each other and as a warning sign for men not to touch 'used goods'.

It is only when reading Olivia's critical commentary that it becomes clear that she wrote the dialogue in order to problematise dominant discourses. Olivia wrote a dialogue between two males in order to interrogate the way young women are positioned by derogatory labels and how they learn to monitor their behaviour within this linguistic minefield. Olivia explains her motivation as follows:

> When writing this dialogue, I hoped to entice the attention of young women who are viewed as 'loose' by young men, treated terribly for who they date and just how simple it is for men, especially those who are friends, to describe a woman as a sexual object of amusement and fun. The term [village bicycle] is used as an insult by men to hurt and to inspire anger. However, as a woman you may accept the term as one of intense jealousy from a man who cannot be with you or one of anger from a family member in reference to how many male friends you have.

She writes her dialogue for other young women who are 'viewed as "loose" by young men'. Hence, she is expecting women to read this dialogue critically. She uses distanciation as a powerful tool which is in contrast to Pete's dialogue where his identity runs though both the dialogue and commentary. As a writer, Olivia's literary and creative voice captures men's sexist constructions of women through a particular language variety. Her academic voice is strongly located in the critical commentary. The juxtaposition of her creative and academic voice places her in a powerful position to implicitly and explicitly raise critical questions. In her analysis, she offers a critical counter discourse. The multivocality of the two texts enables her to critically explore 'the social tensions inherent in language' (Blackledge and Creese, 2014: 7) and to create a space to reclaim her voice in the written form, because as we discovered, she was present when this incident happened and was silenced by her gender.

Conclusion

Teaching disciplinary knowledge in relation to students' lived experiences created powerful opportunities for developing graduate attributes

that are specifically relevant to pre-service language teachers. The use of a heteroglossic pedagogy facilitated both anticipated and unanticipated outcomes. In particular, the juxtaposition of traditional academic texts with narrative and creative texts generated a higher level of *critical thinking* than we anticipated, enabling students to take risks, to experiment with academic and literary voices and to talk back to unjust practices. Hence, *criticality*, *creativity* and *risk-taking* were the three core attributes that emerged.

Students were repositioned as resources for the course and this changed some of the rules of engagement between lecturers and students and among students. However, we argue that drawing on student resources is made productive under specific conditions, if one helps students build conceptual tools for new ways of seeing their experiences. The most significant learning took place here, at the nexus of student linguistic repertoires, experiences and sociolinguistic discourses. The assignment created affordances for creative-critical work as well as emotional distance. Equally important, the heteroglossic pedagogy demanded a certain level of *adaptability*, *mistakability* and *creativity* on the part of the lecturers. One cannot consider graduate attributes in a vacuum; rather, we need to explore the dynamic relationship between lecturers' pedagogy and desired student attributes.

While this chapter focuses on developing graduate attributes in a specific teacher education context, we suggest that it has resonance and implications for other higher education contexts, particularly in humanities. Whatever the field or topic, one can draw on students' lived experiences and expertise and then build on these in discursive and analytic ways. In addition, heteroglossic pedagogy can be applied to any discipline, enabling the juxtaposition of multiple texts and voices. Such juxtapositions facilitate a move away from academic writing as knowledge display, reproduction and compliance towards the development of critical-creative graduate attributes.

Notes

1. We want to emphasise that our understanding of new literacies moves beyond new technologies and includes access to a range of literacy practices across contexts.
2. While we have limited multilingual repertoires compared to our students, we were able to understand the gist of most of the dialogues without the translations because most of the varieties students wrote in are mixed codes.

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7

Open-Ended Dialogue and the Citizen Scholar: A Case Study of the Writing Component of a University-Led Enrichment Programme for School Learners

Pamela Nichols

Introduction

Open-ended dialogue in a classroom assumes unpredictability and the possibility of learning something new. It assumes genuine conversation. Open-ended dialogue is not closed by the teacher because of the assumed limitations of the learners or the learning goals of the lesson. It is rather a disposition towards conversation, which can be precise, formalised and informed, but not closed or dominated by a single authority. It is a disposition necessary for a full engagement with ideas in context and one central to the development of 'voice' in a writing programme.

But what actually happens when one assumes open-ended dialogue as a teaching and learning method, particularly in a country that is not always comfortable with democratic practices?

The importance of this learned habit, pedagogically and programmatically, will be illustrated through an examination of the writing component run by the Wits Writing Centre (WWC) for the Targeting Talent Programme (TTP), at the University of the Witwatersrand (Johannesburg), and, specifically, through an examination of the results of two approaches, which I have termed 'Content as a Mode of Thought' and 'The Resonant Classroom'.

The TTP is an ongoing residential enrichment programme for secondary school learners, and for teachers, run since 2007 at the

University of the Witwatersrand (Wits). It admits school learners from up to 60 schools from nine provinces for two weeks of annual intensive residential teaching for the three years before their final school-leaving matriculation examinations. The schools have been chosen from among those that have not traditionally sent their learners to university. The selected learners are identified as having potential in Mathematics and Science (see Enslin, 2006) and follow a broad range of subjects.

The overall programme has been strikingly successful in that currently over 90% of its graduates achieve University entrance. It has expanded from an initial cohort in 2007 of 600 learners to 1,200 in 2014 (Richards, 2014). The success of these students in securing university access is remarkable in terms of the prior history of the schools. That history has, of course, to be set in the context of the crisis in levels of achievement across much of the South African state education system (see Bloch, 2009).

The TTP is one initiative designed to address the inequality of opportunity experienced by so many learners. It was conceived as analogous to the football model of spotting talent and even though the selection of learners is necessarily limited to a small number from each school, the TTP has the potential for significant scalability. From the beginning of the TTP, the intention of the writing component of TTP was to promote academic practices that can be replicated within the schools.

The pedagogical approach employed by the Wits Writing Centre (WWC) has been adapted from the New York University (NYU) Writing Centre model and works with the understanding that writing is thinking and that student culture can be built by challenging students to take initiative and make those initiatives practical (Nichols, 2011). Consequently, the WWC focus is on building student culture rather than remedial language work (also see Bruffee, 1984 and Murphy, 1991). In the TTP, the WWC did not teach 'Basic English' but, rather, following Goldblatt (2007: 18), attempted to foster learning how to know and do for greater engagement and subsequent access to Higher Education. The WWC joined TTP with the assumption that our work would be to engage learners, provide practice in reading, writing and thinking, rather than offering daily grammar lessons.

The two pedagogical methods designed to develop engaged thinking have been termed, *Content as a Mode of Thought* and *The Resonant Classroom*. Description of what they entail indicates how both methods aimed to engage the learners in critical discussion and to promote the characteristics of the Citizen Scholar.

Content as a Mode of Thought

Content as a Mode of Thought is a phrase used to describe the content of our curriculum. In contrast to other parts of the programme, the writing component of TTP was not information-driven, but was focused on developing tools of argument.

We provided themes and material for study but our primary agenda was to promote practice in critical and academic thinking. The discussions were open-ended and responsive to the directions of the classroom conversations. This approach can be alarming for tutors because it requires the courage to work with the unknown and to accept that the last word on a matter is not necessarily that of the teacher. They require the tutor to improvise as well as to follow a plan.[1] In order to implement this emphasis on active learning and informal as well as formal writing, reading and discussion with frequent feedback, we needed to work with small classes and a comparatively large number of student tutors.

We have always had strong support from the rest of the TTP because a deficiency in English language skills is known to be a major reason why students fail at Mathematics or Science. However, it is important to note that the writing component continued to be termed as 'Language' or 'English', which suggested the pre-existing idea that both are different from thinking. This conception was something that we challenged in the teaching of the writing component as a mode of thought.

We aimed to demonstrate that English and language are not separate from disciplines, but a tool for the learning of critical thinking skills, which need to be honed and applied across the curriculum.[2]

The Resonant Classroom

While understanding content as a mode of thought emphasised the writing-to-learn element of writing programmes, our second pedagogical approach, *The Resonant Classroom*, emphasised the ideas of writing as social action and writing to change someone's mind (Nichols, 2011). *The Resonant Classroom* sought to offer practice in real communication, learning how to communicate a specific intention to a particular audience, and how to make voice heard. To facilitate this development of voice, we set up several habitual, dialogic communication channels.

Participating in the construction of this 'resonant classroom' were the school learners, the tutors, the observer (a Biochemistry lecturer who followed different classes and compared the teaching strategies of

the tutors) and the writing curriculum coordinator. The writing curriculum coordinator designed the programme, served as a coach to the tutors and was the moderator of the unfolding practice within the classrooms.

Five communication channels were used daily.

1. Learner with learner, and then from individual learner to whole class: for example, learners were frequently asked to come up with three questions related to the lesson. These questions were compared in pairs, each pair chose one question, and then a question from each pair was shared with the entire class.
2. Learner with tutor: for example, learners were asked at the end of the class to write an informal letter to the tutor about what they had or had not understood from the lesson. Tutors replied, so that the letters were seen as a genuine communicative act.
3. Tutor with tutor team: for example, the tutors compared experiences and strategies in daily briefing sessions. Also, with the consent of their colleagues, they peer-reviewed each other's classes and discussed their observations with their colleague afterwards.
4. Tutor and tutor team with an observer: for example, the observer discussed and compared her observations with individual tutors and the tutor team on a daily basis.
5. Tutor team and observer with the curriculum coordinator, and then with the overall TTP coordinating team: for or example, the curriculum coordinator listened and responded to the comments of the tutors and the observer, then redesigned the lesson plan for the following day. When deemed useful, this feedback was then passed to the overall TPP coordinators.

By implementing these dynamic, regular patterns of systemic feedback, we developed a classroom that hummed with communication, dispersing authority through constructed and contested communicative acts. The aim was not to arrive at single answers but to surface multiple points of view and negotiated nodes of authority, and to engage these resultant views in conversation so as to promote more effective learning together.

Further, the practice of multiple daily communications was designed to ensure that the pedagogy of the classroom – to listen to and to develop student voice and agency, individually and collectively – was mirrored in the management and development of the tutors as well as in development of the curriculum.

The importance of tutors

Both pedagogies relied on effective and engaged tutoring. While other subject classes in TTP are overseen by lecturers with senior student tutor assistants, we were the only subject which has small groups run by, not assisted by, senior student tutors. Each year we have had at least 16 tutors, initially drawn from trained postgraduate consultants from the WWC and from Biochemistry or Science tutors, who were then further trained in writing facilitation skills by the Director of the WWC. It should be noted that this lack of hierarchy confounded the financial administration of the university and as far as we know, this was the first formalised collaboration between tutors from different disciplines at Wits.

Importantly, the tutors were given the lesson plans as a guide only. It was emphasised that these were *their* classes, and that it was up to them to make the lessons work optimally. This requirement to own their classes resulted in the tutors developing diverse and creative teaching strategies and helped to build their authority.

Written results

The Resonant Classroom produced informal letters that provide empirical evidence of both the involvement of the tutors with the learners and, the significance of the tutors as role models. Additionally, these informal letters present evidence of the learners' developing audience awareness in their writing.

These letters confirm that regular communication with someone the students become increasingly familiar with, and the desire to write to that person about something particular, is likely to enhance fluency and effectiveness. Effective writing is exemplified and practised as the successful transmission of an intended message to a particular audience (Nichols, 1998). The communication becomes habitual, real, engaged and idiosyncratic.

This is illustrated in the voices in the extracts below which portray energy, and even more interestingly, a collective style, for each class. They identify the relationship of the learners with the tutor as well as the specific culture of that classroom. They reveal who the 'good' tutors were and how they were 'good'.

Most of the letters were copied and retained as data with the consent of both tutors and learners.[3] From a total of 600, the following extracts have been chosen for their distinctiveness. They were written to Sipho

and Andrew, tutors with a Biochemistry background, and Smangele, a tutor from the WWC, with a background in Publishing Studies. Each extract is from a different learner and is presented as written.

To Sipho:

Learner A: Today was nice because I got to speak then listen which is something I couldn't always do as I always wanted to be listened to and understood, so today I got to know somebody else better and understand them. Maybe it's the first step of learning how to make friends because I'm the worst in doing that. Lovely Lucrizia O dats gud hey, hope you'll learn a lot from this experience and make more friends! Sipho

Learner B: Today's lesson, I was kind of bored at the beginning because I thought, that eish we are writing an essay, but after I wrote it I was excited because I wrote what I felt and that excited me.

Learner C: Last day started boring because I was told to write a 2,000 word essay. But it actually got VERY INTERESTING when I began writing my essay because I wanted to write more and more and more and some MORE! Looking forward to a great course next year.

Learning D: C-pho u keep on surprising me everytym I attend yre lecture. The way you conduct us is totally different way and I know y is that? It's certainly because you are the youngest educator that ever taught me and because of yre age, you do relate to my interests or like simply because I consider you as my peer. So I really can't say more about today's lecture, but what I can say is "You go C-pho" u r doing a great job. The other thing is that today you taught me to a lot of debate tactics even though you didn't realise . . . Peace Up Sho Jo! Sipho

These extracts suggest the positive energy that Sipho brought to his classes as well as the respect and trust that he achieved. The informal and slang language suggests an assertion of identity, their enthusiasm for the class and that they felt at home. They also demonstrate the dialogic nature of Sipho's classroom: they were thinking together.

Sipho allowed his learners to relax and know that someone they thought of as a peer could be a successful science student. After the programme, Sipho joined the WWC as a writing consultant and subsequently became a member of staff in Biological Sciences at Wits.

The letters to the next consultant have an entirely different tempo.

To Smangele:

Leaner W: I know that I have ability in English but I'm so bad and sometimes it embarrasses me and I'm plunging myself to take English very seriously. You know what's the problem that I don't know English well, is because at school we are not speaking English often and it becomes a problem to some of us so if you could just help us.

Learner X: Sometimes in life you come to a crossroad. In my case I could have come to Wits or stay and enjoy rugby – I didn't make a choice – my parents did it for me. 'You are going to Wits and that's final'. This was where it all went wrong because I'd be more happy and grateful if I was willing and if I wanted to be here – that's what makes life rewarding . . . the ability to choose your own destiny, but alas I was stripped of that!

Learner Y: The other thing that I like about this class is the way that it is conducted. Everyone has the freedom of saying what they think in full and not hurting their thoughts. The class makes you have that freedom of expression and be able to space out your opinions and views without thinking about what people will say about you. I feel greater for writing you this letter and hope that it would be fun to you when you read it!

Learner Z: What about the other students? The ones that don't make it here?

These learners confide their concerns as well as think through issues of learning and agency. Smangele appears to have assisted the learners to reflect, creating a classroom in which there was no 'hurting of thoughts'. Here the students are free to admit weaknesses, to reflect on their decisions and even to think about their friends who were not selected for TTP.

They also thought about their vocabulary. Talking to Smangele encouraged the learners to choose carefully the exact words for their feelings and thoughts, even to make some up, and to discover that writing can be a tool to think further and understand anxieties.

In the last batch of extracts, the conversation bridges race and class.

To Andrew:

Learner M: I have a dream that one day young talented black boys and girls will do things together with white boys and girls.

Learner N: I'm not stroking your ego or sucking up, but I like the way you explain the work. I personally don't think you are going too fast or talk too fast, I can cope with the pace.

Learner O: What I'd really like you to help me with is not about language but about mathematics. I feel that I'm lacking sometimes in Maths and it's affecting my marks. I honestly don't understand the formulas and the simultaneous equations sometimes I find myself confused and completely back to scratch.

Learner P: Firstly, thank you for sacrificing your time in order to come and tutor us, it is a great honour to do that for us. To be honestly speaking you're a great language teacher, your voice is audible enough, the pace and your skills are awesome indeed. I don't have anything that I can't complain. Everything is alright. So far so good and I would like you to keep it up but the only problem is about the science tutor ... she is so extremely RUDE! We can't feel free to answer because of her rudeness but everything other than that I'm enjoying myself. Thanks!

In these interactions, it is clear that the learners realise that Andrew is a top-grade science student and want to learn the 'secrets' of his success. The comments about him 'not speaking too fast' reflect a common complaint of black students about white lecturers. In this case, they are praising him: you speak well; we accept you; we want you to help us learn. In fact, they trust him to the point in which they want him to help them access another classroom from which they feel excluded.

Open-ended dialogue: easy, positive revisions

The letters reveal how open-ended dialogue resulted in both honest interactions *and* more effective writing. Another positive result derived from the principle of open-ended dialogue was the cross-disciplinary conversation made possible by the cross-disciplinary team-tutoring.

This collaboration spilled over several divisions. The WWC tutors were generally from the arts and the social sciences, mainly black, politicised and, in most cases, from township backgrounds. The science students were mainly white from comparatively wealthy backgrounds and less obviously political. The science students were punctual, self-disciplined in their marking and preparation; the WWC tutors were less punctual but good at argument and engaging the learners, whose lives they understood more and whose home languages they could speak. What brought them together was their shared desire to educate the learners in their care and a determination to show that these students, no matter their background, were talented.

As the days progressed, the tutors seemed less separated from each other. When they talked about their weekend activities, it was startlingly

apparent how different their worlds were, but they kept talking and listening to each other. There was obvious real and engaged listening to other views of the world. When, for example, choosing novels for the learners to take home, there was a striking distance between their respective childhood reading, frames of reference and imagination. Yet they heard each other, worked together for a common cause, and after teaching, would give each other lifts home.

Some of the consequences of this alliance were manifest in developing the curriculum of the writing component, and in the staff of the WWC itself. One of the science students volunteered to spend an entire evening creating a comprehension exercise on an article about Ethanol from the Biochemistry curriculum. Two of the science tutors chose to join regular WWC work as writing centre consultants.

The team teaching across disciplines provided us with unexpected learning, ensured that the tutors were learning in the classroom as well as the learners and enriched our teaching content and staff complement.

As well as this implicit cultural learning, there was explicit professional development for the tutors. Tutor conversations were built into the programme through the regular briefing meetings, the conversations with the observer and with observing each other's classes. The tutors wished to learn themselves, so 'mistakability' – or the ability to learn from one's errors – was built into the programme. Learning from mistakes as well as from success was encouraged and no single best practice was identified. Rather ways of tutoring were revealed as creative, multiple and individualistic, and ways of improving tutoring were also seen from multiple view-points. The tutors were consequently encouraged to have an open attitude towards their pedagogical repertoire (Barnett and Valenzuela, 2013). So within the tutor programme, a principle of open-ended dialogue enhanced and informed learning.

Open-ended dialogue: difficult and critical revisions

Outside of our classrooms, however, the principle of open-ended dialogue hit some walls. Our initial feedback sessions were in the general TTP staffroom, and some of our tutors, themselves also top academic Biochemistry students, voiced criticism of the content of TTP science classes that they had observed. Although it had been emphasised to our tutors that they should be careful not to inadvertently undermine lecturers, these comments were overheard and did offend. Offence was increased by the sense of offended authority: tutors were not meant to question lecturers.

More problematically, in a curriculum of coordinators' meeting, the WWC was criticised for encouraging the learners to question. This was a worse offence to power as even the learners were perceived to be questioning authority. This complaint was hard to respond to, because encouraging the learners to question and develop their questions was indeed one of our aims. From the lecturers' complaint, a conflict of pedagogies within the programme itself appeared to have surfaced, linked to different understandings of power and authority in the classroom. Staff conversations were subsequently held in the WWC, and when and what could be passed on was decided strategically.

The lesson from this experience was that open-ended dialogue needs to happen in a safe space and that there is a need for strategic, responsible management of the communications (Evans and Boyte, 1992). While this might be true generally, in South Africa there is a particular need for care in negotiating transformation and the necessary steps towards greater cultural democracy. In this situation, it was necessary to take small steps and to find the right ways and times to speak so as to not alienate potential allies.

Even greater complications through connection outwards

Open-ended conversations also surfaced the previously 'unheard' unhappiness of the school teachers accompanying the learners, revealing further complications of inherited understandings of power and authority. The teachers had been invited to a tutor debriefing session in an attempt to involve them more directly in the work in the classrooms. However, they seemed to be undermined by the energy and the eloquence of the tutors.

The teaching journal notes reflect on one incident in the 2007 programme:

> *I don't think we had thought hard enough about the role of the school teacher, who within this interestingly structured class room, had an undefined role. They were floating and ambiguous in terms of their authority.*

> *My initial idea had been that we would be team teaching with the teachers. On the second day I invited them to our lunchtime feedback session, with the thought that they would also get the lesson plan for the next day, and so team teach with the postgraduate WWC and Biochemistry tutors.*

Most debriefing sessions would begin with energetic discussions among the tutors. The teachers sat silently at the back of the room despite

several invitations for them to express their opinions. Eventually one teacher gave an impromptu speech raising concerns that the school curriculum was not being followed. He saw no reason why science teachers should have any interest in language sessions. He asked for the outcome assessment criteria so that the teachers can decide at the end of the programme whether or not we had achieved our objectives. Afterwards the teacher told me that he did not want me to think of him as a 'trouble maker'. He told me that he had learned to be a science teacher without access to a laboratory.

After this exchange and the discussion that followed, some of the teachers began to work more enthusiastically in both the writing classes and in the other subjects. I think that it was critically important for the teachers to feel free to voice their frustrations, and though this encounter was uneasy, it was also a breakthrough.

Engagement after venting, listening and shifting authority?

Open-ended dialogue also identified issues that could not easily solved. The incident indicated both a tactic experienced as a mode of control – give us your outcomes and we will tick off your success or failure – and the depth and urgency of emotional resentment among the teachers. This manifestation of discontent was encountered again during the following 'strike' year and in workshops focused on argumentation.

In 2008, the teaching journal recorded:

The first session with the teachers was a disaster. I wanted the teachers to experience free writing and using writing to think. I began by asking them to free write on two prompts. The first was to describe the moment when they became interested in their discipline. The second was to think about how that personal experience might impact on the ways they could help their students to learn. These are prompts that have worked well as initial exercises with lecturers at the university who are seeking to turn science courses into Writing Intensive courses.[4] However, at the first prompt, no one picked up their pens. I asked why and a woman at the front said that they could not because they did not want to be teachers. They had (as a group) misheard my instruction and thought that I had asked them to write about how they first became enthusiastic about teaching. The woman explained that they could not write about that because they hated being teachers.

Later, between tears, this teacher told me that many of the teachers really wanted to study Mathematics or Science. Personally, she wanted to be a medical doctor but felt that she had been prevented from

becoming one because of the constraints imposed by race and money. It was, therefore, a bitter thing, for her to see her learners receive opportunities that she had never been offered. While this was surely not the view of every one of the 64 teachers in the class, it did seem to be the view of many.

I was emotionally drained after this teachers' workshop and felt that at this moment I was the wrong mediator. I asked my colleague, Mbongisi Dyantyi, to take the second class. He managed brilliantly, and I think that his previous experience preaching in commuter trains served him well. He stood on a desk and worked the teachers' anger into powerful self-generated rhetoric and argument. It was again an emotional class. With reference to the then recent xenophobic attacks, a Zimbabwean teacher stood up and thanked his South African neighbours who protected him. This particular class required that I stand down, because as a white woman at that moment I could not be heard. Mbongisi Dyantyi in contrast was heard and could carry the conversation further.

Reflection on these encounters recognised the depth and complication of emotions involved and the need for the programme as a whole to carefully engage the teachers and work with them more. The crisis in the South African teaching system is frequently blamed on the teachers, but blame and impositions will clearly not ameliorate the pent up feelings of anger, resentment and exclusion that surfaced. In fact side-lining the teachers will make the consequences worse.[5] The affective component of teacher alienation has to be addressed, and their experiences and points of view must be carefully brought into dialogue with other partners in the project of improving education. Such conversations require humility on the part of the lecturer who sometimes must stand aside to allow others to lead. Authority needs to be negotiated and flexible, with different people guiding the conversation at different times.

These encounters demonstrate how a writing programme built on the principle of open-ended dialogue will connect and reveal wider issues and challenges and allow for a difficult but necessary and collectively thought-through revision. A safe space for democratic discussion can be created, though we must be prepared for a bumpy ride and to respond with an open mind to the resultant unexpected and discordant understandings (Evans and Boyte, 1992).

Conclusion: Access, reflection and connection

For both of the approaches outlined in this paper, *Content as a Mode of Thought* and *The Resonant Classroom*, tutors are essential. Tutors help to build a way of working which involves more learners, more

feedback and more ongoing conversation. They are also likely to be more approachable to learners than lecturers and more able to help the learners to see how they could also become university students. Tutors can knit together the learning environment together to create safe spaces that promote access, reflection and connection amongst the learners and to foster a wider network of engagement.

In his widely influential work on writing and engagement in educational institutions and urban communities, Eli Goldblatt, drawing from the work of John Dewey, has suggested that writing programmes follow four key principles:

1. aim to develop a constellation of abilities that help students become both productive individuals and engaged social beings: access, reflection, and connection;
2. bring the margins to the centre, and recognise that the most stressed students serve as the best guides about what a program can achieve;
3. cultivate relationships both inside and outside school to support literacy learning; and,
4. continually assess, evaluate, and study the program in as collaborative and imaginative a way as possible in order to gain perspective on the local environment.

(Adapted from Goldblatt Eli, 2007: 15)

The two methods considered in this chapter offered access in terms of leading the learners to question, to develop conversations and to delay a premature foreclosure of meaning, to construct arguments, and to learn from mistakes. In their letters, the learners were required to reflect on their thinking and to communicate their thoughts to particular audiences. They demonstrated their evolving ability to craft a message for a particular audience, so showing a facility in adapting their writing to specific contexts, which is the first step in learning to write across the curriculum. They also managed to assert their individual voices as they resonated in their respective classes, into the university environment.

The idea of audience is important to both transformation and to writing effectively. It is hard to speak without knowing something of the audience. Consequently, I believe that first-year students at university also need such practice – particularly those from culturally diverse communities and who find themselves facing what they experience as an unknowable audience of lecturers.[6] We need also to provide first-year university students with the opportunity to find and rehearse their

voices in safe teaching spaces and provide them with approachable mediators and mentors.

The lessons of working with open-ended dialogue applied to the programme itself. All of the participants needed to learn to whom they were speaking, to listen, and subsequently reflect on the issues raised and to learn from mistakes. On the positive side, this discipline of listening resulted in the tutors gaining access to cross-disciplinary conversations. More challengingly, we learnt that open-ended dialogue does not mean that anything can be said anywhere: it is rather a process of discovery, followed by instrumental management, much like the writing process itself, which moves from the personal to the public. Open-ended dialogue revealed reactions that were not easy to hear, or to respond to – such as the teacher resentment. However, by bringing the messy margins to the centre, open-ended dialogue revealed a critical exclusion that the programme as a whole needed to address. The lesson revealed the need to build opportunities for practising a form of deliberative democracy (see Mathews, 2009) that included the teachers, into the learning design. To paraphrase Leon Botstein, our experiment in open-ended dialogue gave us lessons in living side by side as citizens, and those lessons were taught by doing: by the practices and consequences of open-ended dialogue (Botstein, 2015).

The American civil rights movement understood this centrality of literacy and of critical thinking, and of engaged dialogue to the creation of a healthy democracy. Open-ended questioning and dialogue leading to the ability for the individual, in connection with others, to change oppressive conditions, informed the liberation pedagogy of the Student Nonviolent Coordinating Committee (Rushing, 2008). The civil rights movement understood education as a civil rights necessity (Payne and Strickland, 2008) and developed an educational pedagogical practice built on citizen agency in contradistinction to the globally dominant trend of standardization (Cotton, 2012). That model offers an alternative that South Africa needs to understand, to learn from and to practise if a functioning citizen democracy is to be developed and entrenched.

At a meeting of *Democracy Works* in the former Women's Prison at Constitution Hill, Dr. Ruben Richards, founder and Deputy Director-General of the Scorpions, an admired but now closed down anti-corruption force, and negotiator of the longest ceasefire between the gangs and the police on the Cape Flats, was asked what can be done to mend the relationship of the police with the public in South Africa. He replied with the observation that 48% of the South African Police Service

in the 1990s were functionally illiterate. Frustration and anger with, and from, the police, he asserted, was directly connected to this inability to write and hence to communicate effectively and professionally with the citizenry.[7]

In other words, for a country which urgently needs to recover the hopes – and practices – of the Mandela generation for a democratic and just society that opens the doors of education to all, we need to learn to think for ourselves and, crucially, with each other, in order better to understand where we are, where we have come from and what we can achieve through democratic agency (Saunders, 2006). Writing programmes that encourage open-ended and contextually sensitive dialogue, learning and listening together, and greater connection between teachers and learners, have a significant role to play in developing Citizen Scholars at every level of the education system.

Acknowledgement

Notes

1. On the profound learning possibilities created by a writing teacher willing and skilled enough to improvise, see John Rouse's comments in *Unexpected Voices,* 2003, 103.
2. See Jones et al. (2008), who cite lack of writing skills as a major reason why students fail or drop out at university. Also see SJ Howie (2003), director of the Centre for Evaluation and Assessment at the University of Pretoria, whose widely cited study which included more than 8,000 pupils in 200 schools, concluded that learners' 'proficiency in English was a strong indicator of their success in mathematics.' The unequal access to English is confirmed by TTP learners who explained to a tutor that their English lessons at school were taught in isiZulu, quoted in Nichols (2009), Report on the Language Component of Targeting Talent.
3. For a more detailed analysis of the informal letters, see Nichols (2009), Report on the Language Component of Targeting Talent 2007–2009.
4. For a more detailed explanation of the introduction of 'Writing Intensive' courses in South Africa, see Brenner, E and Nichols, P, 'Critical Engagement through Writing (CEW): using writing to promote critical thinking in large classes', in *Large-class Pedagogy: Interdisciplinary Perspectives in Quality Higher Education* 2013, ed. Hornsby D, Osman R, De Matos-Ala J, 97–112.
5. See the first obstacle to a healthy citizen democracy as outlined in the Kettering Foundation Brochure 2015: 'Citizens are sidelined', 8.
6. For further discussion on the importance of listening for a cross cultural-learning environment, see Shee, L., 2011, 'Implementing a cross-cultural

teaching and learning program for academic staff and students at Monash South Africa', in *A Home Away from Home: International students in Australian and South African Higher Education* (ed.) Snyder, L and Nieuwenhuysen, J. Also for a discussion of the importance of listening, see Nichols, P., Heeding the corpse in the cargo: writing centres and the need to listen, *SAHJE* (28) 3, 2014, 894–906.

7. Dr. Ruben Richards was speaking as a panelist at the State of Democracy Debate, with Professor Barney Pityana and Professor William Gumede, held by Democracy Works NPC, 4 December 2014 at the Women's Goal Atrium, Constitutional Hill Precinct, Johannesburg.

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8
Reframing Large Classes through Fostering the Citizen Scholar

David J. Hornsby and Jacqui De Matos Ala

Introduction

Conventional pedagogical wisdom sees large classes as an enormous obstacle to fostering key attributes of the Citizen Scholar. We seek to challenge this narrative by arguing that adopting innovative pedagogical approaches that focus on engaging students can counter traditional perspectives regarding large class learning environments. Indeed, focusing on student engagement speaks directly to the idea of the Citizen Scholar as attributes inherent within proficiencies such as *creativity* and *innovation*, *resilience*, *working across teams* and *design thinking* are promoted. It is hard to imagine a Citizen Scholar who is not, at the core, an engaged individual.

We define an engaged student as one who is an active learner that spends time, energy and resources to enhance their understanding and experience (Exeter et al., 2010). The engaged student is also one who adopts deep approaches to learning, seeking to develop their knowledge, reflecting on content and relating issues to experiences (Herington and Weaven, 2008). This is considered the ideal type of university student as they think critically about the world around them, reflect on the information available, seek to solve problems by understanding associated processes, can adapt to new information, understand cultural differences and contexts and can appreciate a diversity of views – all of which are important attributes for the Citizen Scholar.

Large class learning environments are a much maligned and despised thing. It seems both students and lecturers alike find them difficult spaces to effect learning. That said, in an era of massification and democratisation of higher education, large classes are becoming more and more commonplace regardless of jurisdiction. This chapter

confronts this type of learning environment and contributes to a growing literature that seeks to find ways of reinforcing the social mission of higher education by coping, adapting and mitigating the deleterious effects of large class teaching (Hornsby et al., 2013). Through reframing large classes, we contend that opportunities to advance the Citizen Scholar are not necessarily impeded in large class environments. To reflect on this, we consider student perceptions of teaching and assessment strategies adopted for the proficiencies and attributes they encourage and analyse them against our first-year large class pass rates. This chapter considers the effectiveness of the approaches adopted over four years.

Student engagement and student learning

A considerable body of literature now shows that student engagement is a key variable in determining whether students develop a superficial or intricate understanding of a particular academic discipline which usually translates into academic success as measured by pass rates. According to Carini et al. (2006), student engagement is perceived to be an accurate predictor of student learning and personal development. The logic is simple: the more time a student devotes to the study and practice of a subject, the more they are likely to learn about it. Furthermore, the more students practice and get feedback on their writing, analysing and problem-solving tasks, the more proficient they should become at these.

Student engagement with a subject, however, by no means occurs spontaneously. Students may choose subjects they are interested in but this is not enough to sustain the type of engagement required to develop a coherent and sophisticated understanding of a particular discipline. Although many academics believe that the locus with respect to engagement lies exclusively with the student, there is overwhelming evidence that the curriculum design of the subject plays a pivotal role in fostering an environment conducive to student engagement (Powell, 1982; Rowntree, 1987; Marton and Booth, 1997; Bolton-Lewis, 1998; Kember, 1998; Biggs, 1999). Here we are specifically referring to everything from the assessment types, lecturing style, use of information technology, to the way that we as educators allow students access to practical insights as well as the ability to interrogate the knowledge of academic staff.

But it is more than that. Jensen (2009) believes to facilitate student engagement an educator needs to design classes that get students to

participate emotionally, cognitively or behaviourally. Edgerton (2001) refers to approaches that seek to create an environment conducive to student engagement as 'pedagogies of engagement'. These approaches have within them an active capacity to engage students actively in learning in new ways and include among others problem-based learning; project-based learning; varieties of collaborative projects as well as field-based instruction (Shulman, 2002). Thus, the challenge is to create such environments.

Large classes and student engagement

There is a perception that large classes foster low levels of student motivation, satisfaction and engagement (Exeter et al., 2010). Indeed, they can reinforce a culture of anonymity and impersonal atmosphere in which high absenteeism may occur and where students are able to behave in ways they otherwise would not (Carbone, 1999; Cooper and Robinson, 2000; Mulryan-Kyne, 2010). Large class learning environments are frequently argued to be counterproductive to developing deep approaches to learning as didactic teaching styles are much more commonplace. This results in students exhibiting poor levels of engagement with material, weak performance on assessments and less commitment to courses in general (Mulryan-Kyne, 2010).

We contend, however, that by focusing on engagement strategies, that attributes of the Citizen Scholar can be developed thus overcoming the challenges that large classes pose. This idea is inspired by a literature that unpacks the conditions and contexts under which student learning takes place. Students have been shown to adapt their learning strategies in order to ensure successful completion of a course (Biggs, 1999). This means that the lecturer's strategy and approach matters (Meyers and Nulty, 2002; Exeter et al., 2010; Mulryan-Kyne, 2010). Curriculum design, instruction techniques and assessment can all influence student learning outcomes and engagement (Powell, 1982; Rowntree, 1987; Marton and Booth, 1997; Bolton-Lewis, 1998; Kember, 1998; Biggs, 1999). Meyers and Nulty (2002) portend that to maximise the quality of student educational experience, learning environments must be constructed to ensure that students' adaptive responses to the curriculum become congruent with the aims of the course (Boud, 1982; Ramsden, 1992; Biggs, 1996). All this implies that it may not be the large class size per se that are the problem but rather the teaching and assessment strategies adopted (Scouller, 1988).

The literature supports such a notion and argues that active teaching and learning environments can have a positive influence on student engagement (Mulryan-Kyne, 2010; Exeter et al., 2010). Active learning involves creating environments that are student-centred, that acknowledge student diversity and that involve a reduction of student dependence on the teacher (Mills-Jones, 1999; Mulryan-Kyne, 2010). Teachers should aim to keep students in large classes engaged through the proactive use of visuals, props, guest speakers, personal references and stories, brainstorming, short writing activities followed by class discussions, quizzes, surveys, debates, role playing and student presentations (Carbone, 1999; Mills-Jones, 1999; Mulryan-Kyne, 2010; Exeter et al., 2010; De Matos Ala and Hornsby, 2015).

The form of assessment also influences student engagement. Meyers and Nulty (2002) suggest that to promote deep learning, assessment should 'oblige students to engage with the learning resources and adopt a deep approach to learning'. The instructor needs to 'set assessment tasks that are interlinked and cumulative in effect' (Meyers and Nulty, 2002). Thus, through thinking innovatively about the structure of the curriculum, the strategies employed for instruction and the way students are assessed, student engagement can theoretically be achieved even in big classes.

Student engagement through variation in teaching strategies

As a means of addressing the challenges of large classes while at the same time seeking to inculcate attributes of the Citizen Scholar, a variable approach to teaching was employed. Given that many of the pitfalls associated with teaching large classes relate to issues of passivity, motivation and performance, it was decided to employ a variety of different approaches and medium to generate understanding of key concepts in International Relations (IR) and to counter disengagement.

Table 8.1 refers to the variable teaching and assessment strategies that were adopted as a means of promoting student engagement in first-year Introduction to IR course. Benjamin (2002), Bligh (2000), Davis (1993) and McKeachie (1986, 1999) all argue that student attention spans are a key factor in addressing the issue of passivity. As such, we sought to implement a '15 minute rule' where the instructor would aim to shift teaching strategies every 15 minutes as a means of keeping students engaged. This did not mean that the explanation of a particular concept was finished after 15 minutes, rather a new

Table 8.1   Variable teaching and assessment strategies

Teaching Strategies	Assessment Strategies
Problem-based scenario discussions	Multiple Choice Quiz – *International Organizations*
Visual lecture slides	Multiple Choice Quiz – *International Political Economy*
Small group seminars (tutorials)	Multiple Choice Quiz – *Realism*
YouTube videos	Critical Writing – *Article Analysis*
Podcasts	Critical Writing – *Foreign Policy Analysis*
Guest Speaker series	Critical Writing – *Take Home Exam*
Twitter	

way to communicate that concept was employed. Further, we rooted lectures of abstract concepts in events that students were most likely aware. This was meant to help students find relevance in what we were learning about in the various lectures. Such an approach remains consistent with Gramscian and Frierian ideas that underpin the Citizen Scholar as explained in Arvanitakis and Hornsby, Kourtis and Arvanitakis and Schuhmann chapters in this book (Chapters 1, 4 and 13, respectively).

For example, in introducing core theoretical concepts such as realism and liberalism, students were first presented with a problem: Iran's nuclear ambition. Students were asked to consider for what purpose was Iran pursuing nuclear technology. After a class discussion, we moved into unpacking the different ways to think about Iran's ambitions from a theoretical point of view. After taking a 15-minute break, students were asked if they had any questions, further assumptions of the theoretical perspectives was unpacked focusing on the role of key thinkers. From there a YouTube video discussion of the Iran nuclear negotiations was presented reinforcing how core concepts of power, reciprocity and identity could all be identified. Rooting abstract theory in a real-life event and mixing up strategies to communicate, it proved effective to building student analytical skills, and fostering critical thinking. Further, conducting class discussions, despite the number of students, was helpful as students gave each other feedback and were able to clarify their understanding of concepts. This created a sense of community among the students as they would often clarify their understandings with each other and let them establish a connection with the lecturer.

We utilised strategies which allowed students to learn subject matter through activities that have been designed for this purpose. The

rationale behind this model is that students learn by doing and interacting with ideas, debates and events that are real and of topical interest. For example, problem-based learning scenarios were used in each lecture and tutorials to encourage students to build comprehension and analysis skills and as an engaging way to introduce complex concepts in IR. This was to reinforce with the students the applicability of IR, as a discipline, to world events taking place. The event chosen or the aspect of an event discussed was tailored by the instructors to emphasise the concept of focus for that lecture which naturally instils in students an applicability to what they are learning and is considered an effective way to promote student engagement (Meyers and Nulty, 2002). Throughout the class lectures we varied the modes of content delivery or concept discussion by incorporating podcasts, YouTube videos, DVDs and other audio-visual aids into lectures. It is through this process that students are exposed to key attributes associated with the Citizen Scholar and encouraged to develop *problem solving, critical thinking, adaptation* and *cultural awareness* skills.

We designed our course to move students expectations of being given disciplinary content and focused on strategies that fostered comprehension, application and analysis (Biggs, 1996, 1999; Bloom, 1956). Problem-based strategies and an engagement with media content were done as a means of bringing life to core ideas and concepts in IR. To prevent the use of YouTube and DVDs resulting in passive learning, class discussions and assignments on the material shown was implemented. This advanced such attributes as *people-centred thinking* and *critical thinking*. A guest speaker series was established and offered students a glimpse into practical aspects of IR such as diplomacy, negotiations, influence of international institutions, media, non-governmental organizations and multinational corporations on inter-state relations. The literature contends that being exposed to the practical dimension of an academic field is an important way to facilitate student engagement (Kuh, 2001). Further, exposing students to different perspectives helped develop *cross-cultural understandings* and enhance understandings of what it is to be *international*. The High Commissioners to New Zealand and Canada, the US and Indian Consul Generals to Johannesburg, the Clerk of the Pan African Parliament, a representative from the International Crisis Group, an a eminent Canadian Senator and representative of the Commonwealth, and the South African Minister of IR and Cooperation all came to the class to share their experiences at various points over the four years of the study.

Twitter was also used as an alternative means to engage and include students, permitting them to tweet questions or comments to the lecturers and other classmates. This promoted the importance of *inclusivity* as students needed to engage in different ways of thinking to their own. Having such a virtual space allowed for the lecturers to have an additional way to communicate with and affirm students, rather than just in the large class context which can be intimidating or isolating to some students. It was interesting how students responded so positively to even just having their tweets retweeted by the lecturers. Often students would approach us to say 'thanks for the retweet.'

Continuous and problem-based assessment

It remains clear that how students are assessed is an integral aspect of promoting student engagement and critical thinking. As such, how do lecturers of large classes balance this with the competing problem of the sheer amount of time it takes to mark large numbers of assignments? Here we sought to consider how to overcome the practical challenges and fore-front student learning in our approach to assessments. This required considering what we know regarding different assessment forms. For example, it is well established that in contexts of continuous assessment, students tend to fair better in their performance as they are given more opportunities to learn, demonstrate their knowledge and to adapt their strategies for assessments. This also permits lecturers to craft different types of assessments to account for the variation in student learning approaches and to permit *mistakabiltiy*. Problem-based assessments also tend to result in better student performance as they can apply course concepts to situations that are either rooted in or mirror a real experience, creating a link between conceptual and practical modes.

As such, we constructed six assessment opportunities over a semester that permitted students to develop their critical thinking skills but allowed them space to make mistakes and to learn from them. Three multiple choice quizzes (MCQ) that focused on the basic concepts and content of IR, and three that sought to develop critical thinking and writing skills. The multiple choice quizzes focused on responding to questions pertaining to the textbook readings. These tests gave us a 'snap-shot' of how well students were able to process more complex material in addition to finding a pragmatic way to adopt continuous assessment in a large class.

Three critical writing assessments were constructed which included an article analysis, a policy brief and a take-home examination. Each asked students to apply their knowledge, to reflect and utilise critical thinking to a real-life event or situation. Returning to the Solo Taxonomy, we structured each writing moment to build on the other in terms of what was expected in the form of critical analysis. The article analysis was first and requested students to point out the dominant conceptual paradigm evident in the newspaper articles provided. The policy brief was the second critical writing exercise where we required students to write a brief to the President of South Africa pertaining to making the case for intervention in the fictional state, 'Libegypt'. The uprisings in Libya and Egypt inspired the case giving students an actual event to draw on. Here we provided students with the structure and a set of readings for them to engage with and to develop a set of arguments for and against intervention. Providing students with the structure helped reinforce how to write an essay in terms of developing coherent arguments, supported by evidence and rooted in a theoretical position. The final take home examination sought to get students to apply the structure they used for the policy brief and the article analysis elements of the first and second writing assignments to construct their own essay around a single critical thinking question.

The most recent take-home exam question pertained to the events in the Ukraine–Russia conflict and how globalisation influenced this moment. It was a broad question that sought to touch on the themes of the course. The rationale for this type of exam format focused on giving students an opportunity to give more considered, deeper responses to question at hand and to determine whether higher order cognitive skills inherent to the Citizen Scholar, such as *critical thinking*, are adopted.

Trigwell and Prosser (2014) argue that using the above methods in curriculum design and execution in itself will not result in the adoption of deep approaches to learning by students. There is a qualitative aspect pertaining to the teaching and assessment ethos adopted by educators. That is, the way we teach and assess matters, not just the tools that are used. This arguably speaks to methods employed, not just the content covered and mirrors the notion of the Citizen Scholar. Particularly in large classes, it is easy to revert to focusing on content simply as a means coping in such environments but what we are trying to suggest is that by constructing a course around what will result in student engagement, it is possible to inculcate proficiencies and attributes that help students acquire and find information themselves. Such an ability

prepares students to do well not only in the one course but throughout their degree and in their chosen professions, as well.

Translating pedagogical innovation into student engagement

Below we present data from our four-year longitudinal study into whether our efforts in curriculum design, lecturing format and assessment resulted in student engagement and the adoption of attributes more akin to those of the Citizen Scholar. To measure these outcomes, we relied on two instruments:

1. From 2011 to 2014, we administered the same questionnaire to the students at the end of the 14-week class which assessed the following variables pertaining to student engagement.

    (a) What activities within the courses promoted the most student engagement and critical engagement (academic challenge) with the subject?
    (b) Which types of assessments most encouraged student engagement in that it encourage research and critical thinking skills as well as the degree of academic challenge provided by these activities?
    (c) Did the students engage with IR outside the course – which the literature has identified as a key independent variable?
    (d) How did student engage with IR outside of the class?
    (e) How did students engagement with IR differ after the course in contrast to before they had taken the class?

2. Pass rate data for the last 7 years supplied by the university's data collection unit. This data was gathered so that we could compare and contrast data before and after the new curriculum interventions.

In total, we received and analysed 128 responses in 2011 (34% of the class), 253 in 2012 (60% of the class), 191 (49% of the class) in 2013 and 229 in 2014 (61% of the class). The data from these questionnaires was a mixture of quantitative and qualitative information.

Question 1 – Which aspects of the course did respondents feel encouraged engagement with the subject?

The data shows almost identical trends in the student's preferred manner of engagement with the course material in class across the four
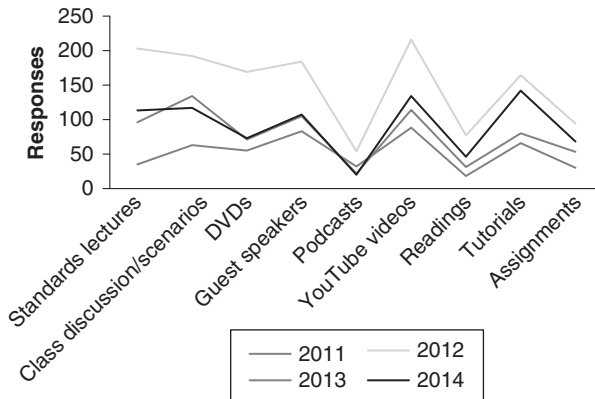
Figure 8.1   Most enjoyable teaching strategies

years of study. Figure 8.1 shows that class discussions and problem-based scenarios; YouTube clips; guest speakers and tutorials are consistently preferred by students. All of these activities have a high level of student/teacher interaction as they were used to facilitate class discussion linked to the topic being covered. Further, they link abstract concepts and theories with reality, making the applicability of IR far more relevant.

The 2012, 2013 and 2014 cohort also ranked standard lectures highly. This is probably because these lectures themselves have become more interactive over the last four years as the lecturers have become more adept at facilitating student/lecturer interaction in the large class environment. This contradicts what is implied in the literature, where students do not participate or are not motivated by standard lecture contexts. In addition, the results suggest that students seem to enjoy those activities that involve group interaction with the course material and each other as opposed to those that would be more solitary. All this speaks to such proficiencies as *creativity, resilience* and *working across teams*.

Question 2 – Which types of assessments most encouraged student engagement in that it encouraged research and critical thinking skills as well as the degree of academic challenge provided by these activities?

With respect to forms of assessment that students found most helpful in allowing them to engage with and analyse the discipline more deeply,
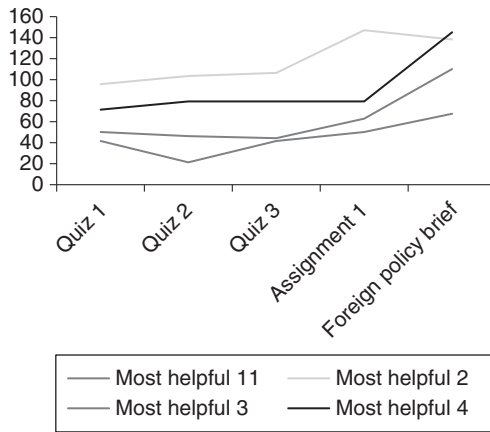
Figure 8.2 Assessment strategies and student preferences

the article analysis (2011 and 2012), nature of conflict exercise (2013) and foreign policy brief consistently rank the highest across all three years in this regard (see Figure 8.2).

Over the last four years, there was also a fair amount of enthusiasm for the often pedagogically maligned multiple choice tests. At the start of the study, we initially hypothesised that student choice of assessments they found to be most helpful may be influenced by those in which they achieved the highest grades. However, in all four cohorts, the class averages were higher on the multiple choice tests than on the first assignment and the foreign policy brief.

This appears to have been as a result of how the first assignment and the foreign policy brief resonated with students and allowed them to apply the concepts and knowledge they had gain across the course.

> *Question 3 – Did the students engage with International Relations outside the course?*

A key indicator of the efforts to promote the Citizen Scholar is whether or not students engaged with the subject outside the class. Over the course of the four-year study, it is apparent that students started to take their own initiative to explore the subject beyond the boundaries of the formal course. Table 8.2 highlights quite clearly, based on student responses, that the strategies adopted fostered a desire by students to engage with IR matter outside of the course.

Table 8.2   Engagement outside the classroom

	2011 (123)	2012 (295)	2013 (191)	2014 (218)
Yes	97 (79%)	247 (84%)	157 (82%)	185 (85%)
No	26 (21%)	48 (16%)	34 (18%)	33 (15%)

Further, student qualitative responses support this:

> instead of just reading the headlines of news articles I now take the time to read the article from beginning to end. I have found that details in the article are very important and enlightening. I tune into the news more than I used to and I now discuss global and domestic political issues with my friends.

> the course has encouraged me and stimulated my interest further. I now have a much broader understanding of global and domestic issues. This is due to the fact that I have now learned how and why particular issues in IR arise.

> I can now relate to world events and understand why certain things occur as well as how they can be rectified or prevented altogether. I engaged in a lot more reading and watching news on television to understand the world around me and keep me up-to-date with current events. I have developed a keen interest in IR and now contribute to family discussions about the world.

Question 4 – How did student engage with International Relations outside of the class?

Similar patterns in the ways in which students engaged with the field of IR outside of the course can be observed across the four years of study. Figure 8.3 highlights that newspapers, television, discussions with family and friends and news media websites were selected by all four cohorts as the ways in which they most preferred to engage with IR outside of the course. Although some may argue that the primary forms of engagement with IR outside among our first-year students constitute more populist, less academic sources, we would argue that this does not make the engagement less significant. In South Africa, these are the sources our students find easiest to access.

The content encompassed in the study of IR is not static; it is continuously shaped by daily interactions between states and non-state actors.
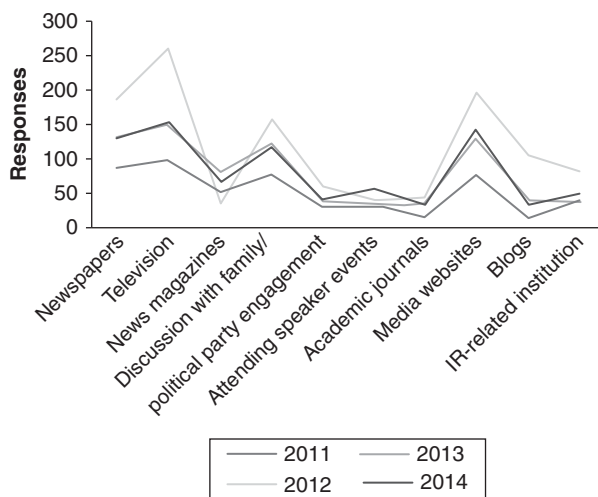
Figure 8.3 How did you engage with IR outside the course requirements, 2011–2014?

Thus, we encourage our students to pay greater attention to current affairs in the media and how these impact and shape IR.

Moreover, in the open-ended question on how students' engagement with IR at the end of the course differed with that at the beginning, many students now said that they were able to engage more significantly with current affairs in the media by using apply concepts and theories as analytical tools.

Question 5 – How did students engagement with International Relations differ after the course in contrast to before they had taken the class.

In the open-ended questions on engagement, students over the four years consistently commented on how both the lecturer's enthusiasm and the 'interesting' course content encouraged their interest in IR further.

Student responses to the question as to whether they engaged with IR through various different medium before or after taking the course provide some illustrative examples of how the strategies adopted impacted the way students thought about IR. These students went on to state that they now engage with these materials on a deeper, more meaningful and

informed basis applying critical thinking and more active in how they treated the information they came across. For example:

> 'Before taking the Intro to IR course but since taking the course I engage with material more actively and critically than before. Before taking the course I engaged in current affairs just to have a bit of knowledge of what is happening around the globe but now I engage more critically and actively.'

> 'I have always read newspapers and often have general discussion with friends about international affairs and politics but after taking the IR course I read and analyse politics and newspapers more critically with better understanding.'

> 'After: My mother works for the UN, only after taking this course did I begin to engage with her regarding her work, the UN and all its operations. IR has given me perspective and guidance toward understanding international activities of states, NGOs etc and possible reasons that determine their actions.'

The feedback from students and the general results show how focusing on particular proficiencies and attributes akin to the Citizen Scholar within the learning environment can have positive effects on student treatment of the subject matter. Student motivation is clearly quite high based on the survey responses and already at the first-year level, attributes like *critical thinking* are clearly coming across.

Whilst understanding student perspectives is important when considering the effectiveness of strategies, it is also helpful to consider how students performed in the class and if any changes were apparent as a result of the pedagogic interventions.

The impact of teaching and assessment strategies on pass rates

The process of re-designing the Introduction to IR component of the first year with the objective of including innovative teaching and learning practices, such as class discussions, problem-based scenarios; guest speakers; continuous assessment, began in 2010. Nevertheless, 2010 really represents a transition year for us, where we played around with curriculum design and tried out new ideas with regards class format and assessments, keeping what worked well and modifying or discarding what did not. The most radical change was to move away from the
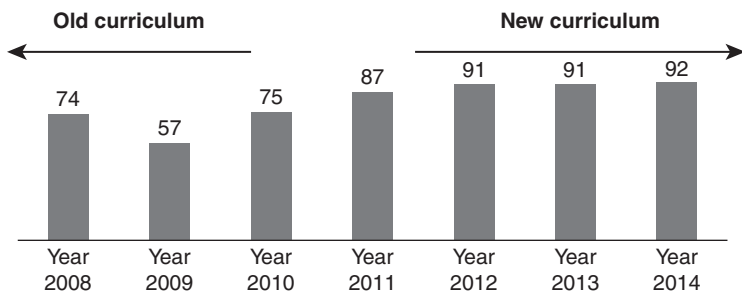
Figure 8.4 Introduction to International Relations pass rates as a percentage, 2008–2014

'chalk-and-talk' model that characterised the previous curriculum and to focus on what we considered to be the ideal graduate.

From 2011 onwards, we saw the implementation of a radically different introductory course to that previously offered. This was particularly in terms of pedagogical practice designed to engage and challenge students to substantially grow their skills and their knowledge in the discipline in spite of the fact that traditional wisdom characterises this approach as inappropriate, unbeneficial and unsustainable in a large environment. However, pass rates from 2011 to 2014 show that student performance has substantially improved under the new curriculum. When comparing pass rates under the old curriculum to that of the new curriculum, there is a substantial improvement in student performance. The jump in pass rates between 2010 and 2011 is as significant as 12%.

What is encouraging to note from the pass rates is how they have improved and been sustained over the period of the study (see Figure 8.4). In a context like South Africa, where higher education is tied so clearly to the development and transformation agendas of the country, improving student throughput is an important imperative. By focusing on strategies that foster engagement, our students are adopting proficiencies and attributes of the Citizen Scholar which they can apply in and outside of the classroom. This is helping them to have the skills and tools to find, unpack and understand the information they encounter.

Conclusion

Ultimately, the longitudinal data shows that by focusing on strategies that advance student engagement, it is possible to counter the

deleterious effects of large classes by fostering key attributes of the Citizen Scholar. This does not mean that large classes are ideal learning environments, but what this study demonstrates is that by emphasising active learning, and a learning that seeks to be relevant to the students in the design and construction of a course, rather than simply focusing on content, it is possible to shake loose the shackles that many believe are placed on large class learning environments and inculcate attributes of the Citizen Scholar.

By treating our individual learning environment as part of a larger learning process, it is possible to improve student performance while at the same time fostering necessary attributes that get students to apply and push the boundaries of knowledge, to think critically and reflexively about events around them, to problem-solve, and to learn from making mistakes, through developing new literacies, and being able understanding different cultural contexts. All attributes are required to cope with our ever-changing and evolving society. We can achieve this even in large class settings if consideration is given to just how we connect, educate and engage our students.

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9

University Massification and Teaching Non-Traditional University Students

Maureen J. Reed

Setting the scene

Professor James feels his first lecture to his business class was a disaster. Teaching has always come easy to him, until today. Professor James recently moved from a small private university to this large public university. The students in his previous school were quite homogeneous. They came to him with similar backgrounds, similar knowledge and his class sizes were never more than forty students. Today was his first experience at this new university. One-hundred and fifty first-year students were enrolled in his class and they were anything but homogeneous. First, while many students were seventeen years, not all of them were. In fact, some students were clearly 'mature'. There seemed to be at least ten students over the age of thirty. Second, prior to the class, the center for students with disabilities had emailed him a list of students who they were assisting. The list had seven student names on it. He had never taught students with disabilities before and wondered if he was supposed to modify his course for them. Third, after class several students came to his office hours. In conversation with these students he learned that some of these students were the first in their families to go to university. They clearly were having difficulties figuring out how to navigate learning at the university level. What was worse, during class, some students seemed not to understand what he was saying while others students were unengaged chatting amongst themselves. One group of

students kept asking odd questions that he felt anyone with a high school education could answer. And then, there were the mature students. One of those students kept interrupting to give his own opinion on each topic and to 'correct' Professor James. It seemed that some of the students were actually business owners. Professor James is nervous. He believed that he would be an asset to his department because of his teaching knowledge, but it seems that he will let his department down.

The experiences of Professor James are all too common for professors today. When teaching, we are often faced with large classrooms and a diversity of students. Students vary in their background knowledge, expectations, resources, support and abilities. Yet, our goal for all of our students is the same; we need to create students who can *critically think*, show *design thinking* (people-centred thinking), be *resilient*, understand what it takes to be a leader and work in today's *international* and *team-based* environments.

While teaching in diverse environments is challenging, this chapter argues that a diverse classroom is the first step towards creating Citizen Scholars.

The massification of university and its effect on diversity

Many countries have increased access to institutions of higher education to larger segments of the population. As a result, in the last two decades we have seen doubling of student populations in higher education institutions across a number of nations (Hornsby and Osman, 2014). Nominally, this increased accessibility has been to allow individuals from a cross section of society, including marginalised groups, access to opportunities traditionally offered to middle and upper classes (Rossi 2010; Prudence and Litien, 2013) and to encourage the population towards knowledge-based industries and technologies (Rossi, 2010). While more individuals from non-traditional backgrounds do attend universities, there remains a gap in accessibility for many due to social (lack of knowledge of higher education processes), economic (lack of funding) and unequal prior education (lack of academic preparation) issues (Rossi 2010; Prudence and Litien 2013). The net result is that more students from non-traditional backgrounds arrive on university campuses, including older students, students with disabilities and first-generation students.

Providing education to non-traditional students has a number of benefits and challenges. Benefits include increased economic opportunities (Hornsby and Osman, 2014), and what follows is increase in employment (Ontario Human Rights Commission, 2005). Interventions to assist marginalised students in attaining higher education have been linked to higher self-efficacy (Reed et al., 2011). In addition, massification results in increased diversity in university classrooms, thus affording all students the opportunity to learn from their fellow students, and in a globalised economy, education about diversity could benefit future employment (Logue, 2007).

Providing education to a diverse group of students also comes with challenges. First, making university accessible often necessitates increases in class size. In many countries, professors are assessed on the quality of the education provided and, as a result, there is considerable pressure to perform well despite the fact that professors may not have experience dealing with large classes or diverse groups of students (Mapesela and Hay, 2006; Owuor, 2012). Second, many students (both traditional and non-traditional) arrive at university unprepared and in need of remediation (Seon and King 1997; Bui 2002; Reed et al., 2006, 2007; Assiter and Gibbs, 2007). This makes it difficult for professors to determine the level at which to teach. Third, traditional and non-traditional students may attend university for different reasons (Reed et al., 2015). For example, Rosado and David (2006) showed that first-generation/working-class students often feel that they are a burden on their families and emphasise the need to achieve economically from their education, where middle-class students often view university as a natural progression in education, one which allows them to explore options.

Given the lack of traditional preparation of many students, their reasons for attending university and the need to create opportunity for students in a globalised environment, professors may no longer be able to teach the way they were taught. Indeed, they need to consider learning outcomes that promote attributes of the Citizen Scholar including resilience, working across teams and design thinking.

Diversity in the classroom: The non-traditional student

Students who were traditionally left out of higher education are considered non-traditional students. These students offer challenges but also allow classrooms to become the first step in helping all students to understand that diversity is a cornerstone of working in a globalised

world. Thus, reaching the diverse student body is important, but so is teaching all students about diversity. This chapter discusses three groups of non-traditional students, as well as the pedagogical methods that will assist not only these students but also the educators in creating an environment for the growth of all students.

Students with disabilities

Access to higher education for students with disabilities has increased over the last decades which have seen increasing numbers going to university (Equality Challenge Unit 2013; McCloy and DeClou, 2013). Importantly, while there remains a large gap in employment rates between those with and without disabilities, higher education significantly reduces this (McCloy and DeClou, 2013).

Students with disabilities represent a heterogeneous group. Disabilities include physical/mobility, sensory (visual and hearing impairment), learning disabilities (normal intelligence with a learning difficulty, e.g. dyslexia, memory, visual or auditory processing), head injury, psychiatric disorders (often stress related disorders and depression) and chronic illness (Ontario Human Rights Commission, 2008). Most frequently, students in higher education with disability are diagnosed with learning disabilities (Ontario Human Rights Commission, 2005). Many, but not all, students with disabilities require accommodations for their learning needs including reading software, access to lecture slides, note taking accommodation, extended time for examinations and flexible deadlines on assignments. There are many ways that accommodations at the university level can create equity for students with disabilities. For example, many students with learning disabilities and visual impairment read at a slower rate than do their non-disabled peers and can be granted extra time in exams to compensate.

Experiences on university campuses for students with disabilities vary considerably. Many systemic and attitudinal barriers towards accommodating students with disabilities have been identified (Eckes and Ochoa, 2005; Reed et al., 2006, Reed and Curtis, 2012) and include poor access to accommodations, resource limitations to accommodate software and learning needs, slow access to accessible versions of textbooks, faculty members' lack of understanding of disability, poor ability of the students to understand and articulate their needs to professors, faculty members' lack of time to accommodate individual student need (Eckes and Ochoa, 2005; Reed et al., 2006; Reed and Curtis, 2012).

Many students require accommodation to compensate for their individual disability. It is important to recognise that this can increase

professor workload, as this requires the educator to modify their course to meet individual student needs. For example, a student who is visually impaired might need the professor to read out each number on a graph so that the student may understand it.

An alternative to an accommodation approach is an accessibility approach. In this approach, the professor considers ways of including as many students as possible, regardless of their learning issues, during course design. For example, rather than only reading what is on a graph if a student with visual impairment is present, the professor reads it out as a regular practice. In other words, the professor makes the assumption that there are likely students who will be helped by the practice. Accessible classes take more time during course preparation, but lead to fewer accommodations for individual students, thus saving time overall. Just how accessible classes can be created is discussed later in this chapter.

Mature students

Most universities define mature students as those who are 25 years or older when first arriving at university. The numbers of older students have increased in university settings and are estimated to make up between 30 and 50% of the higher education student population in many countries (Brill, 2013; Cruce and Hillman, 2012; Woodson-Day et al., 2011). The majority of mature students study part-time, are employed, financially independent from their parents and have dependents (Zafft, 2008; Kenner and Weinerman, 2011).

Kenner and Weinerman (2011) determined that many mature students who enter university do so for three key reasons: they need to upgrade job skills; the opportunity to go to university has just opened to them; and or they just attained their high school diploma and want to continue. Swain and Hammond (2011) showed that the reasons mature students go to university are often related to current life experience. For example, mature students who work full time often go to university for job advancement. Like younger students, mature students see higher education as a way of gaining skills and broadening horizons, but mature students, unlike their younger counterparts, also see it as a way to prove their own capabilities and understand disciplinary content in depth (McCune et al., 2010).

Professors often perceive the older student as being inadequately prepared, lacking writing skills and having a poor academic vocabulary (Zafft, 2008). However, professors also perceive these students to be focused and committed to their courses, good multi-taskers, willing to

study despite lacking general academic skill and able to use their own life experience in achieving academic success (Woodson-Day et al., 2011). In contrast, mature students see themselves as not fitting well into the undergraduate environment and overwhelmed in juggling responsibilities, though able to adjust after their first year of study (Zafft, 2008).

Numerous barriers exist for mature students in higher education. Work and family obligations means they often lack time to complete work effectively, financial struggles take them away from university, and children and partner needs takes their attention from studies (Burns, 2011; Stone and O'Shea, 2013). Overcoming these barriers requires some accommodations.

Persistence to stay in university is tied to goal commitment and perceptions of personal development in all students. However, unlike their younger counterparts, persistence in university for mature students is less tied to integration into the university and more tied to their self-assessment of their own study skills (Grosset, 1991). Successful students cite that higher education allowed them to increase their analytic, writing, management and leadership skills, gave them positive economic outcomes, increased their self-confidence and helped them improve their relationships with others (Jamieson et al., 2009; Swain and Hammond, 2011).

The characteristics of mature students can be challenging for classroom teaching, especially in a mixed environment. In general, mature students arrive on campus with considerable life experience and have an education goal. They view their classes as a means to meet these goals, so deep learning of content is important to them. In addition, they take responsibility for learning, but have expectations that courses will be meaningful (Imel, 2001). In contrast, younger students are often placed in courses as part of degree attainment and these students, while committed to their degree, are less committed to each course.

Creating an effective classroom that is inclusive of both mature and younger students is challenging given their different characteristics and goals. This is particularly the case, as mature students need time to reflect on their personal goals and experiences and put the course into perspective. These students tend to be more engaged than the younger student and often act as role models for the younger group. Given that mature students often feel they do not fit in, taking on a mentorship role or modelling engagement to the younger student is one way to assist them in finding their place in higher education.

First-generation students

First-generation students are those who are the first in their immediate family to attend university. These students come to university with little knowledge of university culture and expectations and have little family support to assist them at university. Considerable research shows that these students frequently have financial constraints and work full-time or part-time, are often from lower socioeconomic status, frequently begin university at an older age than traditional students, are often from minority groups and many have language barriers (Pike and Kuh, 2005; Priebe et al., 2008; Garrison and Gardiner, 2012). First-generation students drop out of school in higher numbers than do traditional students (Pike and Kuh, 2005; Ishitani, 2006; Soria and Stebleton, 2012; Petty, 2014) and tend to earn lower grades (Stephens et al., 2014).

Reasons for going to university are similar to other groups of students though other important drivers include bringing honour to their families and assisting the family financially (Bui, 2002). Yet, these students feel less prepared for the rigors of university and the customs typical of universities (Bui, 2002; Stebleton and Soria, 2012) and often do not feel as though they fit into university as they have difficulties relating to the experiences of the more traditional student (Lowery-Hart and Pacheco, 2011).

Collier and Morgan (2008) examined first-generation students' understanding of university expectations. They share many of the misunderstanding of traditional students: for example, basing the effort for a paper on due dates rather than the complexity of the assignment; believing the professor should consider their busy schedule in assigning work; believing their lack of understanding is due to professors' lack of communication. However, first-generation students also have more time management and priority-setting problems, lack an understanding of the value of the course syllabus, focus on mechanics of an assignment rather than the content and have difficulty understanding course content due to vocabulary limitations. These misunderstandings result in poorer performance and less engagement with courses (Soria and Stebleton, 2012; Stephens et al., 2014).

The challenge of teaching to diversity: Adaptation to university, academic coping, academic self-efficacy

While the goal of most educators is to relay content to their students, teaching diverse groups of learners successfully can improve coping, self-efficacy and adaptation to academic culture. These psychosocial changes

in both traditional and non-traditional students will impact their university success and provide them with outcomes that will assist them beyond the classroom. Certainly, these psychosocial qualities are part of the outcomes necessary in creating a Citizen Scholar.

University adaptation

Many non-traditional students complain that they do not fit in to the university. Clearly, a student who does not adapt well to academic challenges is at risk.

When Crede and Niehorster (2012) conducted a meta-analysis of 237 studies on university adaptation, age, minority status, first-generation status and socioeconomic status were largely unrelated to university adaptation. They suggest that the demographic status of a student – including mature student, first generation, student with disabilities or traditional – matters less than does their personal assessments and university experiences. Crede and Niehorster reviewed the degree to which students adapt to academic demands (or academic adaptation), social adaptation (degree to which students integrate themselves into the university community), individual adjustment (degree to which a student identifies themselves with the university) and personal-emotional adjustment (the degree to which the student experiences stress). The review showed that the student's grade point average (GPA) is best predicted by academic adjustment – something that is strongest when social support comes from the academics and institution. Furthermore, academic and institutional support is assistive in all types of adjustment. These data suggest that student success is most likely through academic development and academic interventions (Reed et al., 2011).

Academic coping

Rosenbaum (1990) argued that all behaviour is goal-directed. When difficulties arise, people will try to regulate outcomes by engaging in self-control coping strategies or 'learned resourcefulness'. Rosenbaum (1990) noted that individuals who possess high resourcefulnes skills make positive self-statements, delay gratification, apply their own problem-solving strategies rather than relying on others, understand efforts required in goal attainment and are generally more successful in meeting challenges (see also Kennett and Keefer, 2006).

When learned resourcefulness is applied to an academic environment, it is referred to as academic resourcefulness. Academic resourcefulness (coping skills) is the ability to set goals, solve problem effectively (plan and evaluate alternatives), think positively about academic challenges,

draw resources such as syllabus, students services and the library to meet academic challenges, structure learning through appropriate study techniques and apply self-consequences (self-reward) for learning (Kennett and Keefer, 2006; Kennett and Reed, 2009). Furthermore, this is related to higher grade attainment and persistence (Kennett and Reed, 2009). Akgun and Ciarrochi (2003) found that students with low and high academic resourcefulness experience similar levels of stress at university, but those with high resourcefulness are more successful.

Non-traditional students are at higher risk for poor grades and low persistence. Some studies have shown that traditional and non-traditional students can be taught resourcefulness within the context of a university course and the attainment of resourcefulness skills leads to higher grades and increases in academic self-efficacy or the belief that one can achieve in university (Saracoglo et al., 1989; Kennett and Reed, 2009; Reed et al., 2011).

As self-efficacy evaluations are in part due to university experience, it is not surprising that poor self-efficacy beliefs occur in non-traditional students who are not prepared for the rigors of academic study. Mills et al. (2006) found that students' judgements of their own ability influences their academic behaviour and can influence performance. While some studies show that interventions can improve self-efficacy beliefs and performance, the type of intervention matters. Griffin and Griffen (1998), for example, found no benefit of peer tutoring in improving performance or self-efficacy beliefs, though it did reduce test anxiety. It may be that improving academic skills raises academic self-efficacy, and skills acquisition leads to both improvements in grades and self-efficacy.

Assisting all students

Overall, studies of university adjustment, academic coping and academic self-efficacy show the importance of academic development in *all* students though they are of particular benefit for the non-traditional student. For university educators, assisting the broad diversity of students in their academic development is a challenge.

Providing individual assistance is time consuming, and given larger class sizes, this may not be practical. Yet, assistance directly from the professor has a higher impact on students than skills development provided outside of the course. Providing support within the context of the classroom can be achieved through Universal Design for Learning – and this is what I will turn to next.

Universal design for learning: Teaching significantly diverse populations well by creating Citizen Scholars

Universal design for learning is the practice of designing course materials with the goal of meeting the needs of all students. This means that the course design pre-emptively considers the learning needs of the diverse population of students and the instructor uses practices, assessments and teaching pedagogy that are known to meet the needs of both traditional and non-traditional students. To do this, the educator must identify critical course content against the content that is not essential. During class, the educator must focus on teaching critical content as follows:

- In more than one way: for example, drawing on lecture, video, discussion and so on;
- Attempt to use natural supports that are already available in the classroom such as pairing students to help one another and online resources;
- Provide more than one form of assessment – drawing on quizzes, tests, assignments and group-work); and,
- Remind students to seek help from the professor, teaching assistants or student services
  (See Ryerson University Universal Design for Learning Committee, 2012)

The implementation of universal design principles in the classroom can help both traditional and non-traditional students. Most university classrooms, due to massification, have changed in demography but not in pedagogy. While many more non-traditional students attend, most classroom content and pedagogy still advantage traditional students in terms of teaching methods (lecture), assessment and resource materials.

Plinar and Johnson suggest that educators should consider Scott et al.'s (2003) list of principles for an inclusive classroom when designing courses – principles that also relate well to the proficiencies outlined here in the chapter by Arvanitakis and Hornsby. These principles include:

- Ensuring classrooms are equitable and flexible (reflecting *design thinking*);
- Ensuring that materials and learning techniques are accessible to them in form – that is, readable;

- Teaching techniques that consider student experiences and abilities;
- Classrooms which are tolerant of error – as it is through errors that students learn and develop (*resilience*, *adaptability*, *mistakability*); and
- Learning needs to be in an environment where students feel safe, comfortable, supported and they can participate in a course while reaching high expectations.

Mino (2004) argues that prior to course re-design, it is important to determine who your students are, and what are the essential components of the course. Expanding on this, Smith and Buchannan (2010) suggest that educators need to determine the broad aim of the course, how that can be conveyed, what critically must be conveyed, what can and cannot be changed, what assumptions are being made about students and how changes may affect student outcomes. Revisions in both Mino and Smith and Buchannan's studies included providing course expectations in multiple ways, using collaborative note-taking methods, providing students more opportunities to express opinion, some choice in assignments, providing study skills resources and providing a variety of assessment methods. Smith and Buchannan found these methods reduced requests for accommodation and improved student attention in class.

Orr and Bachman-Hammig (2009) reviewed 38 studies that reported outcomes of courses that had used universal design. They found that students were appreciative and satisfied when course objectives and intended outcomes were articulated to them; when multiple means of presenting material were used; flexibility in assessments options were made available; and, when learning supports (such as study skills, reading skills and time management) were made available. It was also found that overall student performance was improved with multiple means of presentation, when flexible testing time was used and when students were taught study and reading strategies.

Though such studies highlight that re-design can be successful, many educators find re-design onerous. However, some pedagogical techniques are not onerous and move the classroom to be more inclusive with little work on the part of the professor. Below is a list of easily adopted techniques that are divided by Arvanitakis and Hornsby's proficiencies to create the Citizen Scholar and at the same time relate to the principles of universal design for learning (Ryerson University Universal Design Committee, 2012). Alone these techniques do not create the Citizen Scholar but they are techniques that can contribute to

student development and can act as a model for students when working in the larger community.

Design thinking (people-centred): Students learn best when materials and learning techniques are accessible: that is, people-centred. In a classroom, this might include the following:

- using multiple means of presenting material (lectures, demonstrations, laboratories, group projects, case studies, video and technology);
- presenting single concepts in more than one way such as demonstration followed by a lecture;
- making sure slides are easy to read;
- using technology to enhance learning such as clickers;
- posting notes for difficult concepts and providing the slides used in class;
- moderating language, replacing words such as 'this or that' with specific descriptions/words;
- creating guided notes – that is, notes where some material is left off for students to fill in during lecture;
- keeping the course relevant and current through updating;
- relating important course concepts to real life through the use of news stories, personal stories, research stories and case studies;
- providing materials to students before the class day so students may use them as a guide;
- reviewing the previous day's content at the beginning of class and summarising important points at the end of class;
- ensuring that all students can see and hear; and
- encouraging students to share their own life experiences as related to course content.

Resilience (adaptability, tolerance for mistakes): Students learn best when educators have a tolerance for error because it is through error that students learn. In a classroom, this might include the following:

- encouraging natural supports such as peer-to-peer mentoring, teaching assistants, study groups, opportunities for questions and study buddies;
- encouraging professor–student engagement through various means and media including discussion boards;
- repeating important concepts and providing additional examples of these concepts;

- repeating student questions before answering;
- using assessments that reflect course goals and articulating the link;
- using multiple forms of assessment;
- giving timely feedback on assessments;
- encouraging students to correct their own errors on work and resubmit for minimal grade; and,
- providing students with resources that can help develop academic skills.

Working Across Teams: Students learn best in environments where they feel safe, comfortable, supported by other students and faculty, and they can participate in a course while reaching high expectations. Most importantly, this participation allows students of diverse backgrounds to interact, giving them valuable experience in learning about diversity. In a classroom, this might include the following:

- articulating course objectives and expected learning outcomes;
- making course expectations explicit and delivering in multiple formats;
- encouraging student participation in multiple ways including small groups and pairing students;
- assisting students in learning study techniques, writing and numeracy through course assignments or pre-testing;
- allowing students to ask questions and encouraging questions and discussion;
- allowing students to come up with answers to each other's questions; and,
- allowing students to make up exam questions in groups and have other groups answer them.

Concluding remarks

One commonality among non-traditional students is that educators frequently see them as unprepared for university study. That is, they do not have a skill set that promotes their own success. These skill sets are well beyond simple attainment of course content, but rather involve the ability to read effectively, write effectively, critically evaluate ideas, take effective course notes, problem solve, set realistic goals and self-evaluate their own performance.

This chapter argues that with the attainment of academic skills, including academic coping skills, students improve in their adaptation

to their environment, their self-efficacy and their academic performance. Attaining these goals starts in the classroom. Even if students come to university unprepared, they can learn skills through a teaching pedagogy that considers *design thinking*, *resilience* and *working in teams*. Universal design considerations in teaching are the first step in creating an environment that promotes the acquisition of university skills that will serve students long after they graduate.

And finally, some advice for Professor James:

Professor James has a large and very diverse class that includes students with disabilities, mature students and first generation students. Professor James correctly has identified that he needs to change in order to meet the needs of his students, and that is a positive. Professor James must provide course content, but the way in which he provides it will matter. In the chapter sections above, classroom techniques were provided that would maximally assist all of Professor James' students, not just the non-traditional students. More importantly, the techniques suggested above aid in the creation of the Citizen Scholar, whereby students learn more than just content from their courses but become resilient individuals who can reflect and evaluate their own needs and those of others in a global society.

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10
Changing Mindsets: Moving from the Acceptance of Facts to Critical Thinking

Elisabeth Brenner

Introduction

Most students who come to my first-year *Introductory Life Sciences* (ILS) classes are used to rote learning facts and hold the view that this ability is the most important aspect of their learning. The questions that this chapter seeks to answer are, why is this the case, and what strategies can be used to change their mindsets so that they become critical thinkers?

Critical thinking is an attribute required in many careers. That aside, a democratic society cannot function successfully without informed critical thinkers. Therefore, an obvious university graduate attribute should be the ability to think critically and in this context to question, evaluate information, be creative and resourceful, and to make informed decisions.

Given the importance placed on this characteristic, it is important to understand what we really mean by the term, particularly as, despite often being cited as probably *the* most important graduate attribute, it has been pointed out that various conceptions abound on what it really denotes (Lombard and Gosser, 2008). Facione (1990: 1) in his executive summary of the Delphi Project report on *critical thinking,* which was based on the consensus of a 46-member committee, funded (from 1988–1990) in part by California State University, highlights a statement defining critical thinking as

> purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgement is based.

The statement also contends that:

> The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgements, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and circumstances of inquiry permit.

From this statement, it is apparent that *critical thinking* is an essential skill for all scientists who have to review literature, evaluate what they read, identify knowledge gaps, plan and carry out research in the laboratory, analyse data, draw conclusions from the experimental results and on that basis plan new research and create research methodology. More importantly though is that there should be an awareness that we are not preparing students only to be scientists limited to thinking within the confines of the discipline. Instead, we should be preparing students to be Citizen Scholars capable of the agile, flexible thinking that will enable them to cope with a future world that will be changing from a both global and personal perspective. In this regard, one of the most important attributes of the Citizen Scholar is the ability to evaluate information and situations, and this requires *critical thinking*.

This chapter focuses on principles and strategies for facilitating the development of *critical thinking* in Life Sciences and Bio-molecular Sciences. Nevertheless, I argue that the principles of the pedagogies described can be applied to any university curriculum as they transcend disciplinary boundaries. In order to design curricula and implement pedagogies that encourage critical thinking, it will be valuable to first probe why South African high school graduates are most often not critical thinkers.

The school experience

Despite the installation of a democratic government in 1994, it is apparent that South Africa has yet to deal with both the fall-out from the legacy of educational inequality and general acceptance of information from persons in authority – both hallmarks of the apartheid era. In attempting to redress the effects of apartheid education, the Department of Education has introduced various curricular changes over

the past 20 years. An outcomes-based approach was initially adopted in 1997.

Despite the intention that this sort of learner-centred curriculum should produce learners who could think critically, these curricula have not been without problems. Research to ascertain the effectiveness of the changed curriculum concluded that, to a large extent problems arose because it appeared that the teachers were unable to implement the changes effectively (Jansen, 1998). In addition, subsequent research has confirmed that many schools might be considered ineffective learning environments (Cross et al., 2002; Todd and Mason, 2005).

Although it is apparent that there have been challenges in the implementation of the various curricula introduced to redress the Apartheid education system, what is of particular concern is that the Department of Education has judged the effectiveness of the educational reforms on the basis of the pass rates obtained in the final examination. As such, teachers are under threat from government to produce certain results in this area – creating a teaching environment of memorising rather than learning. This was evident in a workshop that was held for life sciences teachers from a South African province in order to ensure that they were familiar with a certain content area of the curriculum. As witnessed by various observers from Wits University, this group of teachers was instructed that they should make sure to memorise the content. There was no emphasis on how to teach the content by using creative, innovative pedagogical approaches in their classrooms; instead they had tacitly received the information that rote learning was the most valued attribute in learning.

What is equally concerning is that, in order to produce the 'results' demanded by governmental officials, a number of schools 'teach to the test' rather than strive to produce well-rounded, independent individuals capable of thinking critically – something described in this text as the 'Citizen Scholar'. Supporting the presumption that schools place huge importance on the final examination results, an informal discussion with a current grade 12 (final year) learner at a prestigious monastic school for girls in Johannesburg has revealed that 'from the day we walk into grade 8 we are told what we will need to do in order to do well in the final examinations'.

This is corroborated in my experience. For example, one of the first questions asked of me as the first lecturer encountered by new first-year ILS students is 'where can I access past examination questions?' This also attests to the importance that is assigned to going through past question papers and rote learning the answers to the questions. What has become

apparent is that the students have spent most of their secondary school education focussing on obtaining a good result in one examination.

When students apply this strategy at university, many are considerably discouraged when they obtain poor results in their first test and realise that this approach does not work. In light of this, since the students appear to have been exposed to this way of thinking for the majority of their years at school, it is imperative that if we are to produce graduates who can think critically, it is incumbent on us as educators, to bring about a fundamental change in mindset.

Creating a safe space

Before turning to the strategies available to university educators to encourage students to engage critically, it is useful to first look at the power relationships in a university classroom. Previously, many a lecture theatre or classroom consisted of an authoritative figure in the front, delivering pre-determined material that had to be learnt by the students sitting facing forward. The class had no control over pace, interruptions were discouraged, and there was little time for discussion and no place for dissension.

An authoritarian approach by a lecturer, however, is not conducive to questioning or critical thinking. Lecturers cannot hope to encourage students to think critically if they dictate everything from the pace of the lecture to presenting themselves as the unquestionable authority of the content.

Nevertheless, the lecturer still needs to be firmly in control of the learning environment for they are responsible in designing the curriculum and assessment. As such, it is the lecturer who has to provide opportunities for class discussions. Thus, in an ideal scenario, the lecturer will create a relaxed, yet industrious atmosphere in the classroom; one that lends itself to debate, conjecture and *critical thinking*.

The question is, how do we achieve this?

One of the difficulties to deal with is that most new first-year students are understandably nervous and the majority are shy. In my first-year ILS class, each student is now one of over 600 – or part of a group size of approximately 300 in each lecture session. This alone is an overwhelming situation and not an ideal learning environment if one aims to stimulate critical debate.

In an attempt to create a safe space, the first step begins on the very first afternoon of the start of the teaching year that is devoted to a 'writing' workshop. One of the areas dealt with is the value of free writing for

unlocking thoughts and ideas. I traditionally ask the students to spend five minutes writing about their impressions of their first day at university. They are then asked to introduce themselves and to share what they have written with the person sitting next to them, and a few minutes later they are invited to share with the class.

This type of exercise brings the realisation that almost everyone is feeling overwhelmed. Following this process, it is noticeable that the atmosphere almost then visibly relaxes. It also sets the tone for the rest of the afternoon when, as part of the planned activities, the students are asked to identify the argument in a short piece of writing. This takes place in small groups with the help of a post-graduate student teaching assistant. For this part of the afternoon, breakaway groups of students leave the classroom with their teaching assistant and find a comfortable spot outside in which to continue.

To start off the breakaway session, the teaching assistant leads the group in an ice-breaker called 'the name game'. Each student is required to find an adjective starting with the same letter as their name and to state the adjective followed by their name. After the first student has started, the second repeats the name and adjective of the first before adding their own name and adjective. This continues around the circle until the teaching assistant, who is last, will have to name all students present, as well as remember all their associated adjectives.

This process results in much giggling and by the time that the group settles down to complete a short tutorial, most are relaxed enough to not only engage with the process but also to offer suggestions and even to raise questions about the suggestions of others. Another advantage of spending a considerable portion of the afternoon's activities in small groups is that students can be given more personal attention, they feel comfortable participating in discussions, and then when they come back into a large venue they are usually happy to continue engaging in the same fashion. They therefore learn very quickly that the environment is a safe space for debate and discussion, and the lecturer is able to build on this atmosphere in formal lectures.

Encouraging critical engagement in face-to-face teaching

A useful strategy for promoting critical thinking is to pose open-ended questions to the class during lecture sessions. However, instead of letting the more confident and more vocal students answer immediately, I ask the class to first get the opinions of the people sitting near them and to discuss the merits of each person's answer. Then on a pre-arranged signal, the class is called to focus on the lecturer who selects one of the

informal groups to answer the question. The answer is then considered by other groups who are called on to say whether they agree or not and why.

This conveys the message that knowledge is something constructed and interrogated. Thus students are encouraged to contradict/or question what has been said and to ask the questions: 'does it make sense, does it have meaning?' This process leaves them feeling empowered rather than intimidated. Furthermore, it is less intimidating to present the views of a group rather than one's own. It has also been my experience that the students are comfortable critiquing the views of another group as they seem to feel that they are now engaging in a debate about differing ideas rather than criticising an individual. This strategy also provides an opportunity to demonstrate that it is acceptable to make mistakes and to have differing opinions on issues.

It is also fundamental for the lecturer to model how she/he thinks when presented with a problem – particularly if one gets closer to a solution by working from first principles and interrogating the data and facts as they are encountered. This is one of the instances where students can see how a discipline specialist thinks and also conveys the message that the most important aspect of learning is about acquiring the required way of thinking rather than the idea that it is only about learning facts and content.

Linking scientific knowledge with everyday experiences

When I ask students questions pertaining to everyday knowledge, I frequently receive answers that demonstrate that students have previously learnt facts by rote. For example, in response to the question: 'why do we breathe?' the most common response is, 'for cellular respiration'.

However, when one probes deeper, it emerges that many students do not really understand what is meant by the term 'cellular respiration' but have memorised the term. They have also never considered where carbon dioxide, which is expelled from the lungs, comes from, nor have they been curious enough to find out. When asked to delve deeper, I often receive the answer 'I can't remember' from students, again, confirming a lack of enquiry and the emphasis of memorisation in previous learning experiences.

The classroom experiences I have related above point to the need that a 'change of mindset' is crucial – that we need to ensure that students are curious and encouraged to link the concepts that they often see as isolated and disconnected. Craig (1996) foregrounds the basic principles for cognitive change as emerging in conflict between familiar knowledge

and unfamiliar forms. As such, an important part of getting students to engage with new material is to pose questions to establish what they know and also to find out how they conceptualise various aspects of material that they have learnt previously.

For example, almost every student in the first-year ILS class will have learnt about the structure and importance of cells at secondary school. Nevertheless, it is an important part of the first-year curriculum because cell biology underpins so many biological concepts. Consequently, this is the first content area that the students encounter at the start of the year.

In order to probe their prior knowledge, one of the first things I ask students to do is to come up with a metaphor for a cell. From their responses, it becomes evident that most envisage it as a bag of jelly with organelles randomly suspended in it. Students have not considered how the organelles are held in place, what happens to them when they replicate, how materials are directed from one area to another either inside or outside of the cell. Moreover, it is possible to glean insights into their conceptions from their metaphors.

For example, one student thought a cell looked like a pizza. This suggested that it was imagined as a flat object similar to the two-dimensional drawing encountered in her school textbook. Since a great emphasis was placed on reproduction of these two-dimensional drawings in summative assessments at secondary school, most of the students had memorised the two-dimensional drawing of a cell splitting into two. Nevertheless, few of the students had even thought about the mechanistic aspects of how a three-dimensional cell would divide.

After collecting, comparing and promoting discussion on the various metaphors proposed by the students for a cell, I then show a video which emphasises the role of the cytoskeleton in a very obvious three-dimensional cell. The students are thus forced to think of a cell in a completely different way. They are then encouraged to write down a list of questions that they might have about their new perception and to choose a new tentative metaphor for a cell. This type of exercise also demonstrates that knowledge is dynamic and that perceptions change quickly.

Likewise, when teaching the content on cells, the structure of the cell is presented differently from how they have encountered it previously. At school it seems that all they learned in this content area were the names of the various organelles, their macro-structural features and their functions. In my classes, I describe the structures in terms of the molecules that they are made up of and explain the rationale for the

formation of the macro-structural features based on molecular charac-
teristics. This not only gives them another perspective, but also uses
concepts that are taught in chemistry and that they would have come
across in physical science at high school. This forces the students to
cross discipline and subject boundaries and to apply concepts learnt in
one area to another. This approach also requires them to really think
about knowledge that they would have acquired at school but had never
interrogated.

To reinforce the importance of looking at knowledge from different
angles, in a subsequent tutorial session they are asked to read a pub-
lished article that looks at cell structures from an architectural and
physical perspective. The purpose here is to revisit content from yet
another perspective as well as giving students an opportunity to work
in small groups within the large class setting. This tutorial session rein-
forces the earlier workshop session, where they are asked to identify the
argument or main claim in a given text, and also draws on points learnt
from their experience of having had to describe and discuss a hairstyle
during a subsequent writing workshop. This type of backwards and for-
wards referencing of concepts and content areas is crucial for initiating
a mindset change.

The CEW (critical engagement through writing) pedagogy

Much of what has been described so far falls within the ambit of the
critical engagement through writing (CEW) pedagogy (Brenner and
Nichols, 2013). CEW is a South African adaptation of what, in the
United States of America, would be described as 'writing intensive (WI)
teaching' (Bazerman and Russell, 1994).

The new acronym which was adopted for a South African environ-
ment was necessary because lecturers were put off by the term 'writing
intensive', as they envisaged it would entail marking of endless assign-
ments. The adaptation also involved changes to implement the core
ideas of WI teaching in the large classes that are increasingly the norm
in many South African universities. Once the philosophy of writing-
intensive teaching had been explained, there were further objections
including concerns that lecturers would not be able to deliver the
discipline-based content. However, problem-based assignments can be
used to help students to uncover the course content for themselves
rather than relying on acquiring it via transmission by the lecturer.
While this approach does indeed take away time from 'lecturing', it
encourages students to work on their own to read information from
various sources apart from their prescribed textbook.

In essence, the pedagogy calls for class discussion and debate around open-ended questions posed to the class. This is enhanced when the discussion is opened further in a general discussion. This process not only promotes critical thinking but has the added advantage of enhancing deep learning of difficult concepts. The classroom interactions encourage students to engage with the content rather than only trying to record what has been said so that they can learn the 'facts' at a later stage. For example, first-year students enjoyed a debate around whether embryonic stem cell research should be supported. In addition, it also reiterates the concept that the subject is a dynamic, growing field with changing content. This is further emphasised by posting links to accessible contemporary research articles on the e-learning system. The objective here is to expose students to 'real science' thinking so that they cease to consider their textbook as the definitive, authoritative source of knowledge in the field.

Brenner and Nichols (2013) also discuss the opportunities for in-class writing to be used to promote *critical thinking*. For example, it has been found to be an effective way for students to capture the essence of a difficult concept immediately after it has been explained, by being required to write one sentence. *Critical thinking* is promoted in the ensuing discussion where they are asked to critique each other's sentences. Consequently, the classroom becomes student-centred and student-driven rather than lecturer-driven – capturing the essential elements of critical thinking proposed by Facione (1990: 1) discussed above. Moreover, by having to write only one sentence, students are encouraged to find the thesis or main claim in the concept as they are compelled to select this above 'facts' given alongside in the explanation.

Teaching argument

If we are to achieve the desired 'change in mindset' from learning rote learning to *critical thinking*, an important starting point is to ensure that students view each lecture as an argument rather than a series of independent, unrelated facts. Further, if we were to envisage a scenario where the emphasis in Science teaching were to remain purely on content rather than teaching students to *think*, we must question why 'argument' should be taught within a Science curriculum? If we encourage *critical thinking*, however, a first step in evaluating an argument is to be able to identify the thesis or claim in a text.

Additionally, from a research perspective, argument is important in understanding how to interpret and understand data and how such an analysis can impact on the area being studied. Further down the line,

every research paper makes a claim or argument and supports it with evidence. Therefore, it is evident that the teaching of argument is crucial, not only to produce scientists but also if one is to produce the Citizen Scholar – a graduate who is able to think critically both within and across their discipline.

Within the curriculum I deliver, the explicit teaching of argument is undertaken during writing workshops that are held instead of practical laboratory sessions during the first two weeks of term. These are run, as described, within large classes interspersed with break-out sessions led by a teaching assistant.

The idea of an argument as a claim or thesis is reinforced and extended in writing workshops held during the second year of study in Molecular and Cell Biology: Scientific Practice. Students are given short texts to read and are required to identify the main theme or argument. They are then asked to evaluate the clarity and strength of the argument based on the evidence presented in the text. They are also shown pieces of writing that make unsubstantiated claims and are cautioned to be wary of these: in other words, to view everything critically and to question whether a claim has been supported by evidence and whether it can be substantiated.

There is also a focus on 'target audience'. This is done by asking students to identify the target audience in a series of texts on the same topic but written for audiences ranging from the layperson to a scientist working in that specific area in the field. They are asked to pick out words or phrases and to comment on the tone of the article before they make a judgement. This type of exercise is another that lays the groundwork for *critical thinking* as well as providing the foundation to establish their own writing voice.

Learning to be curious: Inquiry and other writing assignments

As discussed, a key characteristic of CEW is that students are given assignments which require them to 'discover content' rather than relying on lecturer transmission. To assist in achieving this approach to learning, students are given one major writing assignment per block. One type of assignment, which is particularly effective for uncovering content and reinforcing the necessity of using critical thinking, is 'Inquiry'.

Inquiry is a form of self-directed learning. First used by McMaster University in Canada, it is introduced to our students in a core second-year course. Students are provided with an open-ended question and asked to work in pre-assigned groups to attempt an answer. For example,

when content on proteins is covered in class, students may be asked to choose a protein to study in depth to determine to what extent primary structure influences the functioning of the protein. This pedagogy develops many of the skills needed to succeed at university and beyond as students must obtain information from various sources (including research-based articles), evaluate it and then decide if it is relevant for use in their attempt to answer the question.

For an assignment in this content area, many choose to interview post-graduate students and/or biochemists working in the field. Students often come up with conflicting information that they bring to group meetings and it is then incumbent on them to persuade their peers that their information is correct. The inquiry assignment also limits groups to make only five slides when presenting to the class. The students must collectively select what to put onto these few slides given the large amount of information available and collected – again promoting *critical thinking*.

The lecturer chooses the presenter for each group randomly the day before the presentation. This ensures that the whole group remains engaged in the task and that completion is not left to one or two diligent members of the group. Group members also assess one another's input in an open discussion and collectively assign a mark to each member of the group. This promotes the ability to negotiate and argue one's case for a better mark.

This inquiry process also has a reflexive element: in addition to participation in preparing the slides to answer the question, students are asked to write individual reports in which they reflect on the route taken to answer the question, the dynamics of the group, their learning preferences and how this process had helped them to learn and unpack the content. These reports form part of the assessment mark but, more importantly, require students to review and offer a critique of the process. This has the meta-cognitive aspect of signalling that inquiry is teaching them new skills rather than just content.

Another writing assignment that enables students to discover content as well as promote *critical thinking* revolves around giving them a reading pack of articles containing content that was not covered in class. The students are then instructed to work in groups to write a collaborative essay confirming or refuting a controversial statement. To do this, they are required to write individual papers from which to compile the first draft of their group essay. The marking rubric includes the following criterion: 'the extent to which the essay had been improved from the original draft'. As such, the group is required to exercise *critical thinking*

when selecting content for the first draft as well as when improving the essay to produce the final form that was submitted.

A further strategy that promotes critical thinking is a short assignment given to students at the beginning of the second year that requires them to design a kit or game for use by first year students, and that teaches the principles of DNA replication. An important aspect of this assignment was that students were required to critique another student's submission. This is another example of a simple assignment that not only requires students to revise content but also to be creative, and to think critically to select facts that would be needed to teach the concept, and to critique the assignments of their peers.

Using technology to support a change of mindset to critical thinking

While the strategies described above are designed to develop *critical thinking* and to alter a 'rote learning' mindset, there is still the concern that in large classes, engagement will be limited (Brenner, 2013) or be focussed on a small section of the class. To counter this, each student is required to hire a personal response system (or clicker) with which to send a response to the lecturer's laptop to questions posed to the class via PowerPoint slides. The responses of the entire class are projected onto the screen so that everyone is immediately made aware of the overall performance.

This technology is valuable for ongoing formative and diagnostic assessments as it enables the lecturer to collect responses from the whole class, regardless of size, identifying the general level of understanding of the conceptual knowledge.

Additionally, this pedagogy has the potential to promote *critical thinking*. For example, clickers can be used to survey opinions about material that has not yet been covered. In this way, they can be used to promote class discussion and debate, and students can be surveyed again to ascertain whether they have changed their opinions. Even in seemingly straightforward questions, the students can be encouraged to discuss their ideas with one another before sending a response. This encourages *critical thinking*, as each individual is required to assess the information gleaned from classmates. After the graphical display of all the responses, the lecturer can initiate a class discussion about the merits of each of the various possibilities and ask students to justify why they responded as they did.

An overarching principle is that if clickers are to be used to promote *critical thinking*, question design and timing are paramount. Questions

can be designed to encompass the higher cognitive levels on Bloom's taxonomy (Bloom and Krathwohl, 1956). As far as timing is concerned, questions should be posed before content is taught to discover prior knowledge and to uncover misconceptions, and often to give the students an opportunity of making predictions based on conceptual understanding of the underpinning concepts.

Using assessment to encouraging meta-cognition and critical engagement

Before concluding, I would like to discuss how engagement with feedback from assessments can also encourage critical thinking. Students so frequently focus on marks that they often do not want to see more than the awarded score. If they are to improve their performance, there is a need to engage with the feedback, reflect on this and on how to improve.

One way to change the mindset that they arrive with is to set a summative assessment very early in the year. In my ILS subject, students are given a feedback sheet on this assessment and then asked to complete the reflective questionnaire: See Table 10.1.

This questionnaire was designed to be completed in conjunction with the test feedback sheet to ascertain where students need to improve as well as to identify knowledge gaps. This approach was designed to encourage meta-cognition that is an essential aspect of critical thinking, especially from the perspective of 'purposeful, self-regulatory judgement . . . ' (Facione, 1990: 1). An additional purpose here is to ensure students realise that rote learning study techniques might be ineffective in a university context.

Analysis of questionnaires from 150 students revealed that the average mark for Biology at school was 75%. Not surprisingly, therefore, prior to writing the test the average mark expected from this group was high (68%), particularly as the content area was one encountered at secondary school. However, after they had actually written their test, expectations dropped to 57%, suggesting that the standard had been higher than expected and the cognitive level of the questions higher than what they were used to. The average mark obtained was 55% – below the expected mark. The responses on the questionnaire were enlightening, confirming our suspicions that the majority of the students were applying the same study habits used at school.

When students are asked to reflect on their study habits in a feedback tutorial, a number of students attributed their disappointing results

Table 10.1 ILS Test 1 feedback and reflection

Did you do Biology at school?	Yes/No
If yes – what mark did you get in your final examination?	
Before writing the first ILS test, what mark did you expect to get? After having written ILS test 1, what mark did you expect to get?	
What mark *did* you actually get for ILS test 1?	
Do you feel that this mark reflects the state of your knowledge or that it is indicative of the time that you put into studying this section of the work?	Yes/ No
. . . because . . .	
Fill in the test analysis sheet and then answer the questions which follow	
After reading the feedback sheet, list your misconceptions/or knowledge gaps (if applicable).	
Are you satisfied with your study methods?	Yes/ No
. . . because . . .	
If the answer was no, how do you intend to change them?	
What mark (%) would you like to achieve in this section in the June examination?	

Table 10.1 (Continued)

Category	Item						
Other Comments							
Test Skills	Carelessness/Clerical Error						
	T Inadequate Answer						
	Changed Answer						
	L Failed to Consider Options						
	C Question comprehension						
Test Panic	Other						
	Forgot Test Techniques						
	Mental block						
	Decreased Concentration						
English Skills	Other						
	Reading speed						
	Vocabulary						
	Reading Comprehension						
Lack of Knowledge	Other						
	Application of Knowledge						
	Comprehension of material						
	Inadequate Notes						
	Poor Retention						
	Missed Test Question Number						

to the fact that they had continued to use the same study techniques from school. When they were presented with different questions that required synthesis and/or *critical thinking*, they often felt disempowered but quickly realise that a change in mindset is called for – the mindset of the Citizen Scholar.

Conclusion

To sum up, this paper has touched on some of the various techniques that have been used in the first-year ILS and in the second-year Molecular and Cell Biology core courses in order to facilitate a change in mindset from blind acceptance of facts to interrogation of knowledge. Students are encouraged to question their newly acquired knowledge and to place it in context with what they have encountered previously. These are strategies that promote *critical thinking*.

In conclusion, it should be reiterated that while the pedagogies and ideas presented have been used to promote *critical thinking* within the confines of university Biological sciences curricula, it should be remembered that these strategies are generic in the sense that the principles can be applied to all learning areas.

A final point to make is that this must all be embedded in the curriculum design. As pedagogy reflects how the curriculum is enacted, one cannot consider only pedagogies and the learning environment without touching on curriculum design. The first-year curriculum has been designed to emphasise how molecular bio-scientists think and how they discover new knowledge. With this in mind, there has been a shift from regarding biology as a body of knowledge that must be learned by rote. The emphasis is rather on conceptual understanding, how concepts are interlinked, and the pedagogy seeks to promote a deeper understanding of the areas covered. There is also an emphasis on continuously creating a link to everyday knowledge. While the learning path is clearly defined and promotes the notion of Biology as a hierarchical, vertical discourse (Bernstein, 1999), there is concomitant emphasis on interrogating facts and making connections to other co-requisite disciplines and everyday knowledge. This approach contributes to the production of *critical thinking* graduates.

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11

Medical Education: Training for the Desirable Traits in Past, Present and Future Doctors?

Joanne M. Lind

Introduction

Consider a time when you have been sick and you have required medical attention. Now think about the traits that you wanted in your doctor, and the best and the worst experiences you have had with medical practitioners.

Studies such as this have been carried out for many years, and as the world changes, the qualities that the public regard highly in their doctors are also changing. A study by Price et al. in 1971 ranked the top 87 qualities patients wanted in their doctors, with good clinical judgement, thorough and up-to-date knowledge and reaching sound conclusions regarding a diagnosis, ranked as the top three qualities on the list (Price et al., 1971). Taken broadly, these desirable skills would relate to most professions: for example, we want our lawyers to have good legal judgement, our engineers to make accurate assessments and our scientists to make unbiased observations, and all professions require up-to-date knowledge, and the ability to reach sound conclusions. Most would argue that all these attributes are still relevant today. However, our graduates today need additional skills that were less relevant in the 1970s. They will need to work across multiple continents and cultures, they will need to be able to interpret the ever-increasing amount of data available to them, and they will likely need to transfer the knowledge across disciplines as they change from one career to the next.

The need to prepare for the future, when training our graduates, has become evident within the medical profession with recent studies placing different qualities at the top of the 'desirable doctor' list.

A study carried out in the United States in 2006 identified seven key traits of an ideal doctor, namely confident, empathetic, humane, personal, forthright, respectful and thorough (Bendapudi et al., 2006). An Australian study of medical students in 2013 ranked empathy, motivation to be a good doctor and good verbal communication as the top three desirable qualities of a doctor (Hurwitz et al., 2013). These skills would be valued in any profession where there is a requirement to interact with other individuals and these skills are moving away from the content-driven approach that universities have taken for many years. Therefore, in the present day where the patient's needs are changing, the training of our doctors must keep pace with what the public wants in their doctors. Similarly our lawyers, engineers and scientists need to have an education that prepares them for the future world. We need to go beyond teaching the facts, rather teaching our graduates to be Citizen Scholars.

The way in which we educate our students cannot lose sight of what university education has historically offered students, namely good reasoning, good knowledge and sound skills in their chosen profession. The resources that are available to access this knowledge and assist in reaching informed decisions has, however, changed dramatically in the past four decades. Google has become an integral part of our everyday lives, as a fast and accessible research tool in a number of professions. A study published in the *British Medical Journal* in 2006 titled 'Googling for a diagnosis – use of Google as a diagnostic aid: internet based study' showed that web-based search engines are becoming the latest tool in clinical practice and that future doctors should be trained in the use of these techniques (Tang and Ng, 2006). This was reinforced by a study in 2013 which showed that 63 percent of resident doctors use Google on a daily basis at the point of care (Duran-Nelson et al., 2013). Similarly, within the legal profession it is acknowledged that there is a place for the use of Google when carrying out legal research, as long as the practitioners are trained in the limitations of such research (Wolotira, 2012).

In addition to training students in the core knowledge and skills required for their profession, we must also train our students in creativity, design thinking, resilience and working across teams (Chapter 1, Figure 11.1). We need to teach students how to best access and synthesise this knowledge, reinforcing the positive behavioural traits that are desired in today's world.

This chapter discusses the educational experiences we need to provide our students with and how we should be providing them. The

focus will be on the medical genetics and biochemistry teaching within a new medical school in Sydney, Australia. It demonstrates how students need training in study skills when transitioning to problem-based learning (PBL). I also outline the suite of teaching tools that have been implemented including blended learning strategies that can be used to revitalise practical sessions by placing them in the position of the patient and encouraging them to reflect on this process; lectures that demonstrate the importance of scaffolded learning; and the infusion of multimedia into this traditional teaching. The final section focuses on the lessons we can learn from student feedback and how the attributes that students identify as important in their educators can help us tailor our teaching styles to encourage student learning. Ultimately, we need to ensure that our students know how to study and that they know how to decipher the large amount of data available today and in the future. They need to be prepared for varied careers not just a skill set for one career.

Integrating study skills into a problem-based learning curriculum

Have you ever sat down to watch an episode of a medical television drama where the new, young or arrogant doctor in the show solves the puzzle of a patient's mysterious illness, curing them by the end of the episode by using an experimental treatment that has only been tested in rats? This is an all too common portrayal of our present-day doctors, creating public misconceptions about how everyone lives happily ever after and that doctors can cure all.

From a medical student's perspective, these dramatised portrayals of doctors can provide a false perception of their future career, making them think that there will always be a solution to a particular problem. These false perceptions translate to their education where increasingly students want to be directed to exactly what they need to learn. Students attending university for the first time seem to have an emphasis on being given the right answer, rather than spending time researching information to arrive at the answer themselves. We want our future doctors to be able to critically analyse a situation, know where to access information, and arrive at an informed decision with an understanding that there may never be a right answer. They need to understand that there may be a range of options available for patient treatment and management, with no guarantee that any one of them will be correct.

For many first-year medical students this requires a cultural change in their approach to study: from memory to critical thinking, as well as a focus on communication skills for patients confronting all sorts of personal challenges. The students need to transition from rote learning facts to PBL where they identify what they need to learn and how they are going to access this new information. As educators, we need to assist students with this transition, providing them with the appropriate skills and resources to become lifelong independent learners. Some of these skills cannot be taught per se, rather students can learn how to develop their inherent skills such as critical thinking, reflective practice, leadership and adaptability. So, the problem comes down to, 'How do we develop these skills in our students; training them how to study for the future?'

Sometimes the easiest way to begin solving a problem such as this is to ask the opposite question, 'How do we NOT want our students to study?' First, we do not want to encourage students to read only one textbook and give them the false impression that the authors of that one book hold all the knowledge for that subject matter. Secondly, we do not want to give students the false impression that knowledge is certain and that all questions will have an answer. Finally, we do not want students to cram for their final examinations, memorising irrelevant facts only to forget them two weeks later. By understanding what we do not want in our student's study techniques, we can begin to develop a strategy on how to train our students in a way that makes them an independent learner that can adapt to a changing world, and sift through the large amount of information to decipher what is accurate, relevant and evidence-based.

The 'one textbook' unit of study is still common in many higher degree units. It enables the students to invest in one item, it provides a scaffold to the educator's lecture content, and increasingly these texts come with a bank of exam questions that can be used to assess the content of the text. The problems with this model are that the students are not encouraged to explore multiple resources, they are not being trained to appraise the quality of the educational information, they are not required to synthesise mechanisms by joining multiple pieces of information together and they often become disengaged with the lectures which do not provide anything beyond what they have already read in their textbook.

The latest research has confirmed what many educators know, that textbook learning alone is inferior to both case-based learning and face-to-face teaching (Worm, 2013). Research has also shown that over half

of medical students prefer web-based information resources, yet many of the commonly used web-based resources contained inaccurate information (Egle et al., 2014). While students need to be encouraged to study a range of resources, they also need some direction in where and how to study due to the sheer volume and variability in the quality of the information. This can be achieved by providing structured study skills sessions that integrate with the curriculum. An example is provided below of how study skills training has been incorporated into the PBL component of a medical degree.

Introducing problem-based learning to students

Problem-based learning (PBL) was first introduced in the 1960s and is now used widely in medical courses around the world. It is designed to integrate concepts and theory from the foundational sciences into clinical reasoning through independent study, rather than a traditional didactic approach alone. The educational objectives of PBL are to create a motivating, student-centred learning where the students acquire knowledge that is integrated across disciplines, clinically relevant and well retained. It also aims to promote team work and critical thinking and encourages students to be sensitive to patient needs (Finucane et al., 1998). The success of the PBL approach has been the scrutiny of many studies over a number of decades (Sweeney, 1999) with evidence showing that a combination of more traditional didactic lectures and PBL teaching is the most effective method in training undergraduate medical students (Nandi et al., 2000).

For many first-year medical students, PBL is a new style of study that requires support and training to be effective. It is important that our medical students are able to sort fact from fiction in the literature, they need to critically analyse information and support their clinical reasoning with scientific evidence.

In order for PBL to be effective, students need to learn how to study in a PBL-based curriculum. An in-house survey at the University of Western Sydney in 2012 showed that around one-third of medical students did not know what was expected of them in their PBL study. In response, we introduced a three-stage introduction to PBL to first-year medical students enrolled in this programme.

Stage one takes place during orientation week and is an introduction to PBL. This session demonstrates to students the types of clinical reasoning that is required in a PBL class. This is achieved by, first, describing the PBL process and demonstrating the steps taken, during a typical

week of PBL study. The whole cohort of students is then provided with the same PBL case and has five minutes to discuss the presenting symptoms in smaller groups of 10 students. A representative from each group then identifies one key piece of information about the case and reports it back to the whole cohort. The session continues in this way as more information is provided about the case so that students are guided through the PBL process, they have an opportunity to practice clinical reasoning in small groups, yet get to hear the ideas of the larger cohort.

This introduction establishes what is required of students during their weekly PBL tutorials, prior to attending their first PBL tutorial. It also primes the students in the process, and the case structures. At the conclusion of the session, the students identify a list of learning issues they would need to study in their own time.

One cannot assume that the students have the study skills required for independent learning that is to follow, and therefore a second tutorial is provided to them on how to access and utilise resources when studying PBL learning issues. This second tutorial is taught collaboratively, with medical educators, scientists, clinicians and librarians all taking part. Students are directed to the types of resources we would expect them to access, beyond Wikipedia. This is a hands-on tutorial, with students researching the learning issues they identified in session one. All students have the opportunity to interact with the staff; they can discuss their study techniques and ensure that they understand what is required of them once their PBL programme begins.

The final stage of the new programme focuses on applied study skills. The aim of this tutorial is to convey the depth and breadth of knowledge students should achieve while independently researching their first examinable PBL case. This tutorial contains less structure than the other introductory sessions. It allows students to set their own pace of study. During the tutorial, each student discusses their experiences with their study to date and is provided feedback about the depth and detail they need to reach. All students need some assistance in how to begin their study for each PBL case, with some students having to be directed to study in more detail while other students require assistance in broadening their area of study.

This training in study skills, aligned with PBL, provides students with the setting of how to tackle their independent study for the week. This creates student interaction with a variety of staff and helps students determine the depth and breadth of study that is expected of them each week. Since the introduction of these sessions into the first year

of a medical programme, the student performance in PBL has improved, and the student feedback has been positive about the new approach. For example, one student who was repeating the year commented: 'I started last year's PBLs not knowing what to expect, or what to do, the support to direct PBL is a lot better (this year).'

Blended learning approach to revitalise practicals in medical education

An increasing number of practicals within medical degrees are shifting out of laboratories and are being replaced with computer-based sessions that have larger classes, fewer tutors, with less need for sophisticated laboratory equipment or the space to house the equipment. This shift can lead to disengagement of the students. It is more difficult to see the relevance of the content when viewing it purely online and the number of distractions during class can increase due to the lure of social media sites, email and general internet browsing. The challenge therefore is to create engaging practicals, which incorporate computers as they would be used in medical practice, yet still maintain interaction among staff and students.

This became the challenge for a group of academics when redesigning the nutrition and metabolism practical component of a medical degree. Historically, the practical component of this unit required students to recall their diet over the past 24 hours, look up the foods they had eaten in a database provided to them, and then work out which components of their diet were healthy and which ones were unhealthy. One of the many problems with this practical was that many foods were not listed in the database, particularly foods from around the world that we all increasingly have access to and is particularly important in an immigrant nation such as Australia. Many students, therefore, could not complete the practical. The practical also lacked interaction among students and between staff and students. It failed to train students how to advise patients on diet and weight management plans, which would be the ultimate goal of such an exercise.

As a result, we redesigned this practical using a blended learning approach. This was achieved through establishing an educational experience that is engaging, experiential, interactive, accessible to all and applicable to the student's future career as a doctor. A range of different activities were incorporated into this new practical in order to achieve this, ranging from physical activity challenges, diet and lifestyle monitoring, online data recording to small group discussions. These are outlined below.

First, the students are placed into teams to provide each of them with a sense of belonging. Students then participate in five forms of physical exercise (walking, jump-squats, sit-ups, balancing and a step routine) to assess the health benefits of each activity. Each student is required to monitor their heart rate before and after each exercise. Team points are awarded based on how well they perform during each task with skill, speed and teamwork forming the basis of the scoring system. On completion of the physical exercise component of the practical, students are shown the heart rate data of the whole cohort so that they can relate the intensity of each exercise they experienced to the physiological response, and they can discuss how this translates into a weight management programme.

Each team then completes a quiz about the nutritional value of different foods and beverages discussing each question and deciding upon the best answer. Again, the teams are awarded points based on the score they achieved in the quiz. This encourages collaborative learning and teamwork, as individual students have differing depths of knowledge with regard to energy intake and metabolic pathways.

Each student is then asked to record their food intake, energy expenditure and sleep patterns for three consecutive days. This requires them to log their personal information in a free Internet-based nutrition and calorie database, which is also available as an App for iPads and smart phones. Then, during the following week's practical, students are asked to log their data into an online survey. This data can be viewed live by the students and they see where their sleep, energy intake and energy expenditure maps, relative to the other students in their cohort. Upon completion of data entry, students re-group into their teams and are asked to discuss their experience of lifestyle tracking over the past week. Each team is given a different discussion question and one member of each group records a summary of their group's experience with using technology to monitor health behaviour, a reflection on their own health behaviour and the value of health intervention Apps in the practice of medicine.

Upon this redesign of the practical, it became the highest ranked practical on student feedback for the semester. Student engagement increased and their feedback emphasised the way it was perceived as relevant in preparing them for their future careers.

Lectures

Lecturing has been the standard delivery mode of tertiary courses for centuries. During my own tertiary education, lectures were delivered by

experts standing and talking at you for an hour. And they occasionally jotted down key points on a chalkboard. This didactic style works well for some students who are good at processing oral and written information. However, these types of lectures neglect visual and kinaesthetic learners. A study of medical student learning preferences demonstrated that 53% of first-year students include visual learning either as their sole preference (5.4%) or in combination with other learning modes (47.6%) (Lujan and DiCarlo, 2006).

With the advancement of technology, lectures can now incorporate music, animations, videos and real-time quizzes, replacing the monotony of one lecturer for one hour. When incorporating a range of technologies in the lecture experience, however, it is important not to lose sight of the learning outcomes of that lecture. Educators should not oversimplify their explanations, as this was shown long ago to impede the subsequent acquisition of complex ideas (Coulson et al., 1989), but rather they should demonstrate difficult concepts from start to finish.

Lectures within the field of medical genetics can now be more engaging than the days of chalkboards, as many key biological concepts are best demonstrated in a dynamic rather than static form. There is a vast array of professional animations and videos available online which can be incorporated into lectures. In 2012, the uptake of this technology globally was presented at the American Society of Human Genetics Annual Scientific Meeting, San Francisco (Lind, 2012). For any one biological process, a vast array of YouTube videos are available. For example, there were 127 unique DNA replication videos that had been viewed over 21 million times between 2006 and 2010. By using this technology in lectures, the educators are appealing to more learning styles, making the content accessible to all students. This reduces the need to rote learn facts and instead creates a structural journey in students' minds, providing imagery that links the science to the disease.

Learning can also be aided by linking the new material with stories that are familiar, interesting or in some cases bizarre. The portrayal of complex DNA technologies in popular culture, or what has been described as the Crime Scene Investigation (CSI) Effect (Ley et al., 2012), can, however, be oversimplified as a good story hiding the real and complex world students need to be prepared to face. For example, you cannot get a complete DNA profile at the push of a button and it is important that our medical students are able to sort fact from fiction. As such, they also need to critically analyse information
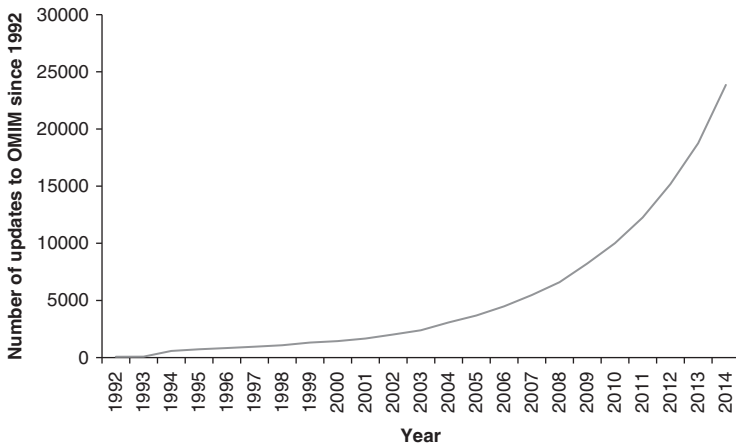
Figure 11.1 Number of updates in the Online Mendelian Inheritance in Man (OMIM) database

Note: 1992 is the first year of recorded updates. Data is cumulative

Source: Data sourced from Online Mendelian Inheritance in Man OMIM® (2014).

and support their clinical reasoning with scientific evidence. This is of particular importance as the amount of information in the world is increasing. Within the field of medical genetics alone, there are now over 23,000 associations between genes and disease (Online Mendelian Inheritance in Man OMIM®, 2014), and the updates to this information are increasing exponentially – see Figure 11.1.

It is important to demonstrate to students the relevance of keeping up-to-date with scientific literature, so they adopt this approach to their future careers. Autism Spectrum Disorders (ASD) provides an example of the importance of contemporary research in medicine. A review article titled 'Genetics of autism spectrum disorders', published in the *European Journal of Human Genetics* in 2006, stated that 'There may be at least three of four genes involved [in ASD] but also up to 100 genes have been discussed' (Klauck, 2006). This statement can be contrasted with a presentation given by Scherer seven years later at the 2nd International Genomic Medical Conference who stated 'While numerous ASD genes have been recognized to date, they only account for a small fraction of the overall estimated heritability, consistent with predictions that there are ~ 1000 loci underlying ASD and that many causal genes and risk variants remain to be identified' (Scherer, 2014). By demonstrating to students how rapidly our knowledge can increase, educators are

providing both content knowledge and emphasising the importance of lifelong learning.

Student feedback as a tool to improve teaching

An engaging teacher can usually be identified within the first five minutes of their class, they capture the attention of the students, they are innovative in their approach and they provoke questions in their students so that the discussions continue beyond the classroom. So, what qualities make a teacher engaging? How does an engaging teacher provide value to a student's educational experience, beyond what a student could have looked up on Wikipedia?

For years I have reflected upon what sets an award-winning teacher apart from the majority of educators. I had thought it was how educators incorporated the latest technology into their teaching, their expertise, and they supported students who needed assistance. While all these things are important, I had never done a true analysis of my own teaching feedback to find out what it is the students actually find value in, and what areas need improvement. For many years, I have struggled with what to do with the student comments on teaching feedback surveys, often filing them away after having obsessed over the single worst comment and yet paying little attention to the overall themes in the feedback. So, as an expert in molecular biology and genetics, I decided to study this like I would when studying a disease.

Context

When studying a disease, researchers are interested in what genes in the body are turned up to produce more of a certain molecule and which ones are turned down. Once this information is obtained, an enrichment analysis is then performed to work out what categories of genes are turned up and/or turned down. This information gives the researcher insight into what the mechanism is that leads to disease.

This same type of analysis can be applied to student feedback on teaching with the aim of identifying what the best characteristics (those that are turned up) and the less desirable characteristics (those that need to be turned down) of a particular teacher are. Identifying these characteristics gives the teacher an idea about what value they are providing to their students, and in what areas. The value perceived by the students may actually differ from the value perceived by the teacher. Understanding how students perceive their teacher can help define your
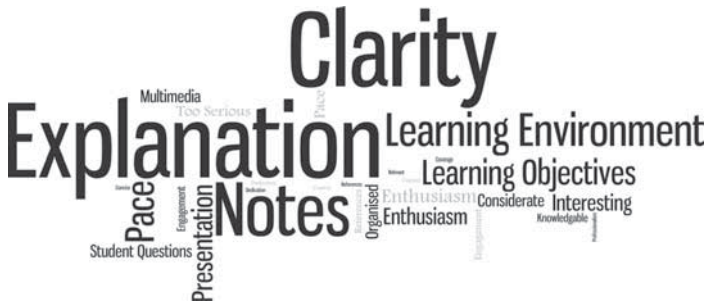
Figure 11.2   Word cloud of student feedback on teaching

Note: Dark grey lettering indicates 'Best Aspects'; light grey lettering indicates 'Needs Improvement'. Larger text indicates a relatively greater number of student responses for that theme.

teaching pedagogy, targeting the values that your students want in your classes.

Analysis of student comments

Each year, first-year medical students are asked to comment on the 'Best Aspects' of my teaching and the aspects that 'Need Improvement'. The student responses range from a single word, for example, 'Enthusiasm' to a few sentences of feedback. To analyse the data I condensed each comment in the most recent round of feedback to one or two single-word themes (e.g. Presentation). These words were then placed into word cloud software to generate a map of the student's feedback (Figure 11.2).

Results of analysis and lessons learned

The top three themes identified in the student responses are Explanation, Clarity and Notes. Interestingly, there were a number of themes that ranked in the 'Best Aspects' and 'Needs Improvement' including Enthusiasm, Pace, Engagement and Dedication. This highlights the need to recognise that not all students perceive a class in the same way and that we cannot always cater for all students' needs at the same time. These contradictions in student feedback enable you to understand your cohort, allowing you to provide varied resources and activities to cater for a broader group of students. Medical students are relatively homogenous in their educational abilities as they are selected through a rigorous process which combines measures of academic excellence and communication skills. Yet, the feedback shows that there are still contradictions

in the attributes they like best in their educators. It is anticipated that teaching within a unit that contains greater diversity in student's educational backgrounds, disciplines and abilities is likely to identify a greater number of contradictions that will need to be catered for while teaching.

This feedback raises more questions than answers for me and my pedagogical approach. Am I training students to be critical thinkers or do they not think beyond my explanations and notes? Am I teaching the students to be self-directed learners or are they rote learning the facts only to forget them a few weeks later? Am I training students to be citizen scholars, with a diverse set of skills, or am I teaching to the traditional view of tertiary education only providing knowledge and skills in the students' chosen profession? While I do not have answers to all these questions, it has made me more aware that I want to emphasise the proficiencies and attributes required of our future doctors rather than assuming that they can identify for themselves that they have acquired this different set of skills.

Aside from how I can use this feedback to improve my teaching, this exercise has enabled me to reflect on what is important in the delivery of my teaching. It has taught me not to lose sight of the basic communication skills, such as clear explanations as these are highly valued by our students today. By providing value to our students, we can better engage them with the content being taught and train them to stay up-to-date with the research in their fields and take a lifelong learning approach to their future careers.

I have clues that our students are gaining skills beyond what is being directly taught: they ask questions about the content that shows a level of deeper thinking; they apply their knowledge to multiple disease states, adapting their knowledge from one discipline to the next; they link their knowledge to patients they see during their clinical training and reflect on how their knowledge aligns with the experiences of the patient. It is not clear however if all students are passively acquiring these additional skills and attributes. As an educator, I will begin to actively train students in proficiencies required of our future doctors, such as critical thinking, leadership and communication, ensuring they are prepared to be doctors of the future, not just doctors of today.

Conclusions

Our future doctors need to be trained in a way that is compatible with their future careers as a doctor. They need to know how to access

accurate information, be able to critically analyse this information and relate it to the patient's before them. They also need to be trained to be reflective practitioners, placing themselves in the patient's position and using these experiences to be caring and empathetic to their patients needs. Finally, we need to incorporate up-to-date, real-life data into our teaching to demonstrate the importance of scaffolding their learning so that they can continue to build upon their knowledge base during their future career as a doctor.

As educators, it is our responsibility to respond to the needs of our students, ensuring we are providing a valuable experience in our classrooms that is both engaging and educational. In addition, we want to provide experiences that challenge our students' thinking and create an environment where we are graduating Citizen Scholars, not just scholars. We cannot assume that by providing sound skills and knowledge within our disciplines, our students will automatically develop all these additional skills. Instead, we need to incorporate a skill set and cultural awareness beyond their disciplinary knowledge. We need to train our students to work across teams, to be resilient and creative and to approach problems using design thinking. These students will lead our future generations and be armed with more than knowledge. By expanding what we provide to our students, as educators, we are ensuring a better future for all.

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12
Experiential Learning: The Game as a Teaching Tool to Reach Multiple Audiences and Cross-Disciplinary Divides

Sharon Fonn

Introduction

A fundamental concept underlying this collection of chapters is the notion of the 'citizen scholar': a person able to collate and critique evidence and, subsequently, take action. The aim is to facilitate the development of students who have 'agency': that is, both the desire and ability to act on their environment and, if appropriate, change it. However, this is not just any action. If, as is posited, universities in the process of producing graduates are fundamental to a nation's economic and social development (Pillay, 2011), then the way university graduates operate in the world needs to reflect this.

Publicly funded institutions of higher education need to define, as part of their mission, their contribution to development. At least, a part of this involves promoting equity and the conditions in which every member of a society has a stake in their community – and thus a tangible motivation to contribute positively. This sense of inclusion or belonging is a fundamental component to reduce levels of crime, to lower motivation towards extremism of any kind and to attaining higher levels of economic and social development. Inclusiveness demands that societies recognise their own diversity and embrace it – something that institutions of higher learning have an important role in promoting.

To achieve this, higher education institutions need to understand that learning is a complex process of which only one component is 'being taught'. It is the methods of teaching that is the focus of this collection –

but not just the how, we must also understand why innovative educators adopt certain strategies.

Two challenges that face educators in the twenty-first century are the diversity of the student body and the complexity of the world we live in. Both of these demand that educators rethink what and how they teach. Diversity requires us to communicate effectively with a range of learners with different backgrounds and capabilities. Our complex world requires us to acknowledge that no single disciplinary approach is sufficient to understand or impact on the world around us. Experiential learning offers one approach to respond to these challenges. Experiential learning using simulation games, the focus of this chapter, teaches a principle, value or process to approach particular problems. Experiential learning is as much about the process of learning as it is about the content. Because it teaches a value or method to approach any number of issues, it is particularly useful in communicating values over and above what is being taught.

One approach to experiential learning, simulation games, are a particularly helpful way to communicate a complex representation of reality in a simplified form to teach overarching principles. Simulation games have been defined as '...modes of getting students to learn by provoking inquiry rather than by "feeding" information' (Greenblat, 1973).

Games as a method of teaching are not new, and discussions about their merit and place can be found in the late 1950s and early 1960s when they were particularly prevalent as a method of teaching in business schools (Faria and Wellington, 2004).

A recent UK study in the higher education sector found that simulations including games were used across a range of disciplines from mathematics to creative writing (Lean et al., 2006). The study also assessed the difficulties in using this approach to teaching and concluded that resource availability was not an absolute barrier. Rather, the first barrier that must be overcome is the perceptions about the inappropriateness of such approaches that dominate many academics' preconceived ideas. Further, the risk that educators associated with these alternative methods had to be assuaged. The notion of risk associated with alternative teaching methods is interesting as traditional approaches have not had to prove their worth; they are just the status quo and assumed to be valuable.

Systematic research comparing teaching methods has not been rigorous enough to draw any firm conclusion. A meta-analysis of 93 studies, however, found that simulations and games were more effective than conventional lectures in influencing attitude formation but not

on cognitive development or retention (Dekkers and Donatti, 1981). But to be successful, games must be used appropriately and with a clear goal in mind (Randel et al., 1992). While 'off-the-shelf' pre-existing games have their place (Dorn, 1989), those that are specifically designed can be tailored and thus more appropriate to a particular audience.

In this chapter, I describe a game developed by myself with very specific goals in mind that exploits the potential to influence attitudes. It is this aspect of simulation games – influencing attitudes and thus developing the qualities of the citizen scholar – that is explored and exploited in the game described in this chapter.

The game consciously attempts to deal with a range of issues. Firstly, it aims to present complex information that draws from a range of disciplinary backgrounds. Further, the game was planned and applied to deal with the fact that the audience was diverse and the simulation is applied to promote inclusiveness. Both of these approaches (multidisciplinarity and inclusiveness) build on the notion of working across teams, a proficiency of the citizen scholar described in the introductory chapter. Finally, it aims to challenge preconceived ideas by using data and requiring the audience to engage with the evidence rather than with a subject area or their preconceived opinions. This aspect resonates with such attributes as resilience (adaptability and mistakability), creativity (critical thinking) and design thinking (ethical leadership) that are brought to bear when participants use the evidence to influence their opinions and decide on a course of action.

The game

My approach is to invite people to engage in the learning experience without contextualising it. I don't want to distract them by getting into the content – rather, I want them to be confronted with evidence that they produce themselves through processes the game requires of them and then to interpret it. Once they have articulated the principle illustrated, it is possible to apply it to either this particular content area or other similar challenges.

While the game is designed such that the principle will emerge, it is a 'leap of faith' on my part that the audience will think I am worth following – particularly as the activity seems eccentric. In every case, I play the game without any introduction or orientation. I just explain the rules of the game and invite people to participate.

The game begins with, participants divided into two groups.[1] Each group is given an opaque bag full of marbles. The group draws marbles

out of the bag one at a time until 100 marbles are chosen – this represents 'screening' 100 people. There are two colours of marbles in the bag. The marble of one colour denotes a 'healthy person', and pulling it out of the bag constitutes screening. There is a numerical cost associated with pulling the marble out of the bag: the cost of screening. The second colour denotes a person who is sick and in need of treatment. Again there is a cost to treatment. They count how many marbles they have of each colour, the healthy and the sick, from the 100 they have screened.

From here, the participants can work out how much it costs to pull the marbles out of the bag (100 multiplied by the cost of screening) and how much they had to spend on treating (the cost of treatment multiplied by the marbles that were the second 'sick' colour). The groups can thus describe how much this programme will cost.

They fill this information in a table where they have to list the cost of screening, the cost of treatment, the cost per case screened and the cost per case screened and treated. They repeat this process at least three times and each time record the costs in the table. They can thus see the pattern that develops, the numbers who are found ill at the first and each subsequent screening and the costs over time associated with this screening programme. They work out the cost per person screened, the cost per life saved and the changes in this over time as you do subsequent screenings.

In one bag, there is a higher proportion of 'sick people' than the other. The pattern that emerges in both groups is that the highest proportion of sick people is found at the first screening and subsequently decreases over time. The total cost of screening remains constant, but the cost for treatment decreases over time. Thus, they see similar patterns within each group – how costs change over time irrespective of how many people are ill. They also compare between the two groups and so understand the impact of screening where there is a higher prevalence of disease – that there is a higher return on investment in the bag that has a higher proportion of 'sick people' in it.

The participants are led through a discussion about what they found and how they interpret these findings. Based on the game they have just played, they are asked to make a decision about which bag of marbles is more cost-effective to screen and why.

Thereafter, they are presented with actual country-level cervical cancer data that are the content or subject area of this simulation game. This is the first time 'cervical cancer' is introduced into the discussion, and

based on this they are asked to decide on a rational cervical screening programme for South Africa.

Everyone participates in this rather strange and levelling activity together. They are equally confused and feel equally silly about pulling marbles out of a bag. They are taken up with organising the group: who pulls out marbles, who counts, who makes sure the marbles do not roll off the table, who makes sure the colours are correctly identified, who ensures that only 100 'people' are screened; and they collectively grapple to assign costs and fill in the table.

Games are not serious, and it allows participants to suspend their own interests while getting on with the somewhat outlandish task at hand. It distracts them from their entrenched positions as they struggle to make sense of the patterns that are emerging in the table they are completing. Without teaching dry-hard concepts, such as the first-pass effect in screening or cost-effectiveness, participants make sense of the data for themselves and extract principles from them. They see and describe the effect of screening on populations with different prevalence of disease and the effect of screening frequency.

After defining the principles themselves, they apply it to their own real-world situation, fostering critical thinking and the use of evidence to inform decision-making.

It also promotes a sense of inclusivity because from my experience, everyone tends to get actively involved and work together in the group – though how each group achieves this varies. It is thus anti-hierarchical in nature, as everyone can and does participate and all have to get out calculators or cell phones to work out the table.

This example illustrates how a particular pedagogical approach promotes design or people-centred thinking – a fundamental dimension of the citizen scholar. This process also demonstrates ethical leadership – where the decisions that are taken will be evidence based to benefit those most in need and use resources most rationally and effectively.

It is important to note that the exercise did not begin with a focus on undergraduate students. The motivation to develop the game was to build policy consensus among a group of diverse people able to influence, develop and implement policy. These were all people who could either support or overturn the policy itself or stymie it by not committing to its implementation. This promoted evidenced-based decision-making, as well as a sense of responsibility to take decisions and take action to improve the health of women beyond entrenched or preconceived ideas.

How it began

Leading up to the first democratic elections in South Africa in 1994, a number of institutions were doing policy work to inform post-apartheid South Africa, including developing women's health policies (Budlender, 1994). Within this context, I was working with many role players to develop a policy to decrease deaths from cervical cancer, which, at the time, was the biggest cause of female cancer mortality in South Africa (Cronje, 1985). Cervical cancer is a common preventable cancer which, when found in the early 'pre-cancer' stage, can be treated and prevented in the vast majority of cases (WHO, 2002). At the time that this education intervention was developed, the gold standard for detection was screening by a cervical smear. The questions, however, were, who to screen, how often, and if this was affordable.

Policy development is a complex process involving a range of actors. Defining the actors and their interests and thus how to influence each set of actors towards consensus is the work of policy analysis (Walt and Gilson, 1994). Actors in this area had entrenched positions. For example, women's health activists, mindful of previous neglect, instinctively felt that *all* women should have cervical smears as frequently as possible. Clinicians, doctors and nurses often described the case of a young woman they saw die of cervical cancer and how they were affected by the loss of life and responded emotionally. Their opinion was not formed by the fact that cervical cancer in young women is rare and that older women, who are often not even getting to basic health care services, bear the highest burden. Politicians, policymakers and Department of Health officials were new at their jobs, came with various backgrounds and experience, but wanted to promote women's health and needed to know which approach to take and how to balance the multiple needs they had to address.

All of the actors had some but not all of the required range or depth of necessary knowledge. Clinicians, for example, needed to understand population-level effects rather than individual impact, something they are not trained in. Women's health activists had to understand that policy-level decisions have to take costs into account and that providing everything for everyone would leave other important programmes unfunded. These vested interests were often informed by positionality rather than rationality and were further hardened by a sense of being 'right'.

Each of the actors came from different backgrounds – whether it was a constituency they were representing, their gender, professions, level

of education, knowledge or skills they possessed. The diversity was significant (some people had tertiary education and some only primary education) and wide (conventional clinical doctors and trade union shop stewards) – and a method of engaging all of them was required. There was no way that each actor could be given the full set of skills and knowledge required which ranged from health economics to clinical medicine. However, they did need to develop a deeper 'feel' for the issues.

In the South African context of policymaking, there were two consequences of playing this game. Firstly, the game format allowed everyone to learn the same principles despite having varying disciplinary backgrounds and levels of education. As such, the pedagogical approach addressed diversity and promoted inclusivity. Secondly, it allowed each person to challenge their own preconceived ideas and forced them to apply the principles they had defined through the game to the problem they were addressing. It was possible to consider different positions and promote a sense of adaptability.

And it was considered a success. In discussions following each iteration of the game, with multiple audiences ranging from nurses, pathologists, gynaecologists, trade union members and staff in the department of health, across South Africa participants changed their original position and at least understood, but many supported, the proposed policy of less frequent screening aimed at older women.

From policymaking to teaching students

But the game seemed to offer great potential beyond solving the immediate policy problem. It could be applied as a teaching mechanism for public health because there are many similarities between the audience who engaged in the cervical cancer policy development process and the public health community.

Public Health is by definition an applied, multidisciplinary field that aims to improve health at the population level. In its most progressive form, it is fundamentally concerned with redressing inequity: in order to both reduce health inequalities and to redress inequities in the social determinants of health. Public health brings together researchers, academics and public health practitioners from a wide range of backgrounds – and it is a place where theory and practice meet. Some come into the field with a strong theoretical foundation from the social sciences. Epidemiologists and statisticians, for example, have an implicit epistemology. Some articulate it as such and see the overarching

theoretical frame; some approach it as a mathematical tool and do not articulate a theoretical underpinning. Doctors, nurses and other clinicians (rightly or wrongly) often consider themselves to be informed by a body of knowledge that is 'factual' and 'atheoretical'. Practitioners get on with the provision of care or the running of health programmes or clinics and are involved in the day-to-day work. Those who entered public health from a human rights background may focus predominantly on questions of dignity and equity in outcomes.

In the field of public health, all these people bump up against each other. Sometimes in opposition, sometimes in concert with mutual appreciation and respect for what each perspective brings. Even those who appreciate the diverse backgrounds involved in public health respond differently, where some work within their disciplinary silo while others cross disciplinary boundaries or work in functional multidisciplinary teams. Teaching public health as a field requires contributions from a range of disciplines sometimes taught serially but often taking a multidisciplinary and multi-pedagogical approach. Some of the teaching must be creative and non-didactic in nature, while other topics require lectures delivered in traditional form. While a public health approach is often included in undergraduate-level teaching, it is predominantly a postgraduate qualification that attempts to build competencies and skills to improve population health. As such, the diversity of the student body, in terms of their prior qualifications and training, age, gender, nationality, years of experience, language and the level they occupy in any hierarchy in which they may be employed, is almost always a feature when teaching public health. It is in addressing this diversity in the student body that creative non-traditional methods of teaching have particular relevance.

It has been postulated that how you teach is as important as what you teach (Fonn, 2003), and in this compendium it is also being suggested that how you teach is perhaps even more important than what you teach. By undertaking this varied approach, we are portraying the creativity and interdisciplinarity we expect from our students as we seek to produce graduates who are citizen scholars.

This simulation game proved effective as a method both to address diversity in the target audience and to introduce content and theory from a wide range of disciplinary backgrounds. With this in mind, I have incorporated it into many scenarios in addition to the policy process described above, including postgraduate public health students, doctors specialising in public health, and PhD candidates from various disciplinary backgrounds (including demographers, lab-based scientists,

journalists, social scientists, medical doctors, statisticians, epidemiologists). It is also integrated into a curriculum, published by the World Health Organisation (WHO), which promotes a gender and rights orientation in health systems development (Cottingham et al., 2001). This WHO curriculum, comprising many aspects aside including the above-mentioned game, has reached thousands of people in Asia, Africa, Latin America, the Middle East and Australia. In a formal evaluation of the course, it was noted that the participatory nature of the teaching was one of the reasons that it 'has fostered the development of skills, influenced individual behaviours, and enabled the application of skills and concepts to solve problems within their own institutions' (World Health Organization Department of Reproductive Health and Research, 2010).

More recently, this game has been integrated into the training of medical doctors at the University of the Witwatersrand, Johannesburg. There are at least 200 students per class, and for part of their training they are divided into smaller groups for various teaching session – with each session having a maximum of 50 students. This provided an opportunity to test one concern I harboured about this approach to teaching: can anyone do it and will it work with an audience that comes without experiential field knowledge? It is this question I attempt to answer next.

Can anyone teach this way?

The game is easily described, and anyone can follow the guide and implement it with any group – the value and complexity lies in interpreting the findings and leading the group to conclusions in an interactive way based on the principles it aims to illustrate. How much background in health economics and epidemiology and the natural history of cervical cancer is required to make it meaningful for students? How well versed does the educator have to be?

While it may be relatively easy to give a lecture on disability-adjusted life years or cervical cancer, it is much harder to engage students in the relationship between the two and then link that to policy choices and health outcomes. The facilitator, therefore, must bring together various threads from multiple disciplines to ensure that students are able to understand such complexities. This is particularly challenging when dealing with undergraduate students who lack experience.

Then there are the challenges of the pedagogical approach itself. The majority of medical students do not value public health as a discipline

quite as highly as clinical training. The population-level impact is somewhat distant and intangible and thus something that students find hard to appreciate. It is also just not as 'sexy' or appealing as 'saving lives'.

In addition, the academic must have a level of confidence to request that a group of people play a game. Not everyone has either the academic status (such as being a Professor) or the personality to do that. What allowed me to pursue it nonetheless was that it had already been applied successfully with reluctant audiences that included senior oncologists and gynaecologists and health economists.

In writing this chapter, I approached staff who now continue to use this game in training medical students, asking a variety of questions. Here are some of the responses:

1. How do you feel teaching through a simulation game?

> This session is the only part of my medical students teaching I really enjoy. Part of this might have to do with the fact that I can't bear to teach large classes … But really, it always gives me instant gratification. I can safely say teaching this session to medical students is one of the few experiences where I get the pleasure of literally seeing the penny drop – each and every time.

This perspective was corroborated by another colleague, who said, it was 'fun and enjoyable' and that it was 'easy to deliver the material' and it had a 'high impact'.

2. How does teaching in this way compare to conventional lectures?

The responses were all positive, stating that 'it allowed for a practical demonstration of a somewhat difficult concept'. Additionally, it was noted that

> it's a great way of getting the students to participate and think through the concepts. I always find that the students participate – they engage with each other and with me. They ask questions and respond to my questions, they argue their viewpoints', as well as 'it is more interactive; it is also more enjoyable than didactic teaching.

One further issue that can be helpful in using this game is to acknowledge to the students that this is a different learning method and to invite the students to take a risk and go on this journey with you. I emphasise

that the worst that can happen is that they will have spent an hour or so having fun. This is in and of itself part of the pedagogy as it breaks down barriers between the educator and the learner – making the teacher vulnerable. This is not the usual approach employed in medical student training.

The teachers currently using this methodology have indicated that background content and context is essential to teach it. All agreed that some knowledge on cervical cancer and a general understanding of public health (epidemiology, health economics) is required. One felt that understanding the health system and real-life situations faced in public services is also essential.

This is encouraging as it would be problematic if no disciplinary background and knowledge is required. The game, even if easy to play, requires significant skill and knowledge to interpret, as well as disciplinary depth, so that the concepts can be made accessible to learners. In fact, it might require more skill in drawing together multiple theoretical frames into one learning event. The point, however, is that the pedagogic method assists educators to teach complex and interrelated concepts. Finally, I asked them if having had this experience has influenced their approach to teaching outside of this session. All responded positively:

> Not only personally, but at the Departmental level we have been trying to think of more interactive ways of teaching students. For example, this year we created a Facebook profile to lead a discussion on risk factors and levels of prevention. Our challenge is running smaller group sessions with increasingly larger classes. We possibly have to start looking at web-based teaching that would allow for this.

There is one area however where the current teachers depart from my own approach and that is in relation to starting the game without any context. They offer a lecture on cervical cancer prior to the game for the entire class. This may reflect a certain lack of confidence in the method and mirrors perhaps the risk averseness that Lean et al. (2006) discuss. It is, however, not known how many of the students who take part in the simulation have also attended the lecture. Regardless, it confirms the point I have emphasised repeatedly: that it takes confidence to play a game as a university-based teacher of medical students, and not everyone has it. Alternatively, the current educators may not trust that the methodology works without this context. Knowing there was a lecture may give the educators the confidence to play the game;

however, it still needs to be answered whether the learners need the lecture.

There is however another interpretation that seems equally valid. In my version of the game, I was specifically attempting to confront hardened, preformed opinions of who, when and how often to screen for cervical cancer. In the case of medical students, there is no reason to assume they have any opinion on the subject, so blinding them to the subject area may not be relevant. Perhaps, this variation by new educators is exactly what is required and demonstrates critical application of the game appropriate to this new audience.

Concluding thoughts

This is an example of experiential learning through a simulation game that reflects a real-life experience to draw out universal learnings (Miettinen, 2000). In this example, the application started with policymakers and postgraduate students who have some relevant life experience in cervical cancer, health services or policy to bring to the simulation. Later, it was applied to medical students who did not have that same experience – but the simulation game nonetheless was required to communicate the learning without reference to real-world experience.

My own experience is that it does communicate general concepts to those who play it and is effective with medical students even early on in their training. It is perhaps the unique value of simulations, which is that they can communicate broader principles to a diverse audience.

Facing high levels of diversity challenged me as a teacher, and forced me to be more creative and to distil for myself what the core learning points were and then find ways to communicate them. As one of the staff now using this method noted: it required 'skills to conceptualise something so simple yet so brilliant in explaining a theoretical concept.' Personally developing it was not a very conscious process, it somehow came to me, but this was after years of employing experiential learning methods. It was highly rewarding trying it out and learning that it worked. Using simulation games to teach is fun; developing them is even more fulfilling.

Reflecting on the teaching process employed in simulation games, it also became clear that the facilitator must bring a wide range of knowledge to the learning process. There is also a need to emphasise how having an appreciation of the role of multidisciplinarity is an essential component in delivering this program.

Some may take the cynical approach that simulation games simplify complexity. I would argue that this approach reinforces the need for deep knowledge. Pedagogic methods that appear as games that are easily replicated do not replace significant depth of knowledge and understanding of the underlying content or theory being taught. In particular, in this example, at least five bodies of knowledge have to be brought together: epidemiology, a clinical knowledge of cervical cancer, some understanding of health economics, health policy, and some knowledge of the local health care system. In that regard, this particular two-hour module with medical students strikes me as very cost and knowledge efficient in that students are introduced to a number of disciplines and are required to bring them together. It seems impossible to imagine covering that range of issues in anything less than a semester.

It is important to emphasise, however, that this is only an introduction and they do not leave with deep knowledge. Rather, the students developed a theory to explain the phenomenon which is the focus of their experiential learning, which then promotes deep learning as well as the various attributes of the citizen scholar, encouraging students to further explore the concepts introduced.

Of interest is that even those educators not familiar with this approach can play the game with ease and enjoyed the experience. There appears to be a virtuous cycle; seeing people learn makes educators want to teach. Simulation games promote an alternative, non-didactic, methodology that engenders the active participation of the students which is what makes the educator enjoy teaching. In this instance, it also motivated these teachers to think of new ways of approaching their other teaching responsibilities.

While the game itself revolves around cervical cancer, the focus and learning is more about resource allocation and can, therefore, be applied to any number of issues both within health and beyond. Such an approach promotes the type of creativity outlined in the opening chapter of this book by James Arvanitakis and David Hornsby. The game inculcates a learning process that leads to rational and defensible decision-making. In doing this, students must reflect and think critically.

What is known from this particular example is that the game did have a population-level impact. It was an integral part of building consensus which resulted in a widely canvassed and broadly supported policy position on cervical cancer that was eventually incorporated into the National Cancer Control Programme of South Africa (Klugman, 2000). This kind of positive impact is the ultimate goal we should be

promoting as educators and is at the core of the graduates we describe as citizen-scholars.

Acknowledgements

Notes

1. Though I briefly outline the game here, a more detailed description can be found at Cottingham, J., Fonn, S., Garcia-Moreno, C., Gruskin, S., Klugman, B., Ndeto Mwau, A., Ravindran, S., Snow, R. and Xaba, M. 2001. *Transforming Health Systems: Gender and Rights in Reproductive Health* Geneva, World Health Organisation and at http://apps.who.int/iris/handle/10665/67233, assessed on 2 February 2015.

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13

Contra Coloniality on Campus: Teaching an Inclusive Philosophy of Practice under Precarious Conditions

Antje Schuhmann

Introduction

How do we teach and who do we teach how under which conditions? What are the challenges and what works – not for us as individuals or even the students, but for the collective production and sharing of knowledge and experiences? How can one be a contemporary version of an organic intellectual, inside-out of a diverse classroom, situated in a liberal, semi-public and semi-corporate university in the global-south, in South Africa? These are just some of the challenges confronting a contemporary academic wanting to promote education as a mechanism of social justice.

To answer these questions, we need to stop filling encyclopaedic knowledge into students as if they are empty vessels for empirical data and decontextualised facts.[1] Culture and education must be a way to develop ones own self, to realise the inherent historic value of each of us and to understand ones own rights and duties.[2] The inspiration for this approach to education is drawn from Italian revolutionary Antonio Gramsci, who, more than a 100 years ago, demanded exactly this. He aimed to revolutionise education systems in order to transform society – and have society reform the education system.

Opposed to the traditional notion of an intellectual, Gramsci presented us with what he called organic intellectual,[3] a person who does not only describe society but also articulates through the language of culture the emotions a certain group experiences.[4] Gramsci (1982)

argued that this should not be reserved exclusively for this in positions of privilege, but was essential that everybody, particularly those at the margins of society, are enabled to access the agency inherent in such articulations. To achieve this, educational systems must radically change in order to allow for the development of organic intellectuals belonging to, what is labelled in South Africa euphemistically as, 'formally disadvantaged groups'.

I agree with Gramsci: inclusive education aiming to transform societies cannot be achieved within inherited authoritarian, hierarchical and bourgeois institutions of learning – which even in post-apartheid South Africa remain burdened by an institutional culture of white hegemony, a situation the developing student movements of 2015 describe as learning under conditions of coloniality on campus. Maria Lugano describes this condition as such:

> With the expansion of European colonialism, the classification was imposed on the population of the planet. Since then, it has permeated every area of social existence and it constitutes the most effective form of material and inter-subjective social domination. Thus, 'coloniality' does not just refer to 'racial' classification. It is an encompassing phenomenon, since it is one of the axes of the system of power and as such it permeates all control of sexual access, collective authority, labor, subjectivity/inter-subjectivity and the production of knowledge from within these inter-subjective relations.
>
> (2010: 745)

The arising question is, how to work as an educator inside-out of these structures, how do they impact on my teaching and how can my teaching impact on them?

Gramsci, in line with others such as Fridthjof Grundtvik, the founder of the Danish people's education movement in the mid-nineteenth century, envisioned radically transformed educational systems. These systems are moulded along the principles of imagined transformed societies in the form of anticipating islands; or, to speak with Mao, who later aimed to generate 'free territories' within existing destructive and exploitative social realities. I argue that today this is particularly relevant for universities in post-conflict societies battling with the legacies of centuries of violent colonial oppression and (neo)-colonial exploitation – and very contemporary forms of structural exclusion.

Such an approach demands a new relationship between teacher and student: the position of a 'teacher' is seen as a function all can

appropriate as *educators must be educated too*. This speaks to the notion of the Citizen Scholar as developed throughout this book and articulated in the introduction, the relationship between lecturer and student is focused on the mutual sharing of tools, experiences, analysis and knowledge situated in respective subjectivities rather than an objective one way, top to bottom approach where the lecturer is positioned in an Archimedean point of total knowledge.

*   *   *

How to approach teaching and learning, and how not to do so, is informed by the multiple ways as to how I was educated by my teachers and how I am educated by my students and colleagues. I would like to *thank* them all – but especially my professor and mentor Berndt Ostendorf. He taught me at my *Alma Mata* in Munich, where I was a under- and postgraduate student, and he supervised my PhD. I did not study in a university system Gramsci envisioned as spearhead of a new society. However I experienced pockets of freedom for development in the sense of political agency and intellectual self-realisation. The tension between a normative learning environment and such niches formed the sociopolitical framework and the psycho-social landscapes I encountered as a student, an experience which informs my teaching practice today in various ways.

I began to study in Germany briefly after the reunification of East and West Germany. This was a climate of re-politisation – one could say the radical left's last attempt to defend its subcultural chic and oppositional hegemony in the face of an emerging chauvinism and neo-fascism.

I also studied *before* the implementation of the so-called Bologna Process, the European 'harmonisation' of academia along the lines of an Anglo-Saxon university tradition and in the context of an intensified neo-liberal corporatisation of public education. I paid no fees and wrote my PhD in postcolonial studies after visiting multiple disciplines and institutes: from philosophy, to American cultural history, literature theory and social psychology. I chose seminars and lectures according to my interests – which were mainly feminist and anti-racist politics off campus. I was in no rush to finish, which allowed me to absorb, resist, digest and mature, having had to finance my student life through social work with young school dropouts and in refugee shelters allowed for a reality check. Learning about different understandings of culture spoke to my experience of the emerging crossover of political social movements with subcultural and art practices in 1990s Germany. I was against the

'system', something that got on the nerves of my liberal parents, who surely regretted more than once having instilled an anti-authoritarian and critical attitude in me.

My critique of the status quo, initially still slightly dogmatic, was complexified through my study in the America Institute. Under Professor Berndt Ostendorf, back then the institute's director, I was exposed to international scholars, many affiliated to or involved in Afro-American political philosophy and practice, and to German lecturers who were highly influenced by the Frankfurt School's Critical Theory. Critique was rather understood in a 'robust European sense' of problematisation instead of 'critical in the colloquial, Anglo-American sense of being adversely inclined' (Spivak, 1993: 6).

This investment in critique guides my teaching, following Spivak's argument that critical means a philosophy that is aware of the limits of knowing In contrast, dogmatic means a philosophy that advances coherent general principles without sufficient interest in empirical details (Spivak, 1993: 27). This approach gives rise to *critical thinking* – or learning how to think about thinking. This becomes increasingly relevant in a complex world. To achieve this within our institutions, we can no longer employ the empty vessel approach but must work to enable new structures. Structures that facilitate a learning experience which will enable students to adapt to new situations and settings; to constructively relate to diverse environments, to difference and possible situations of alienation; to not only tolerate but thrive in changing environments; to learn from mistakes and to process constructive criticism; to give and receive feedback; to innovate and to imagine the world differently in order to find new solutions to what seem like intractable problems.

All this requires practical skills from self-presentation, managing group dynamics and mastering Internet literacy to deal with the width of information available and developing practical research skills.[5] The required skills are practical but reflect sites of philosophical and political construction sites, changing attitudes towards binaries such as homogeneity, stability, sameness, purity and linearity versus heterogeneity, flexibility, change, diversity and hybridity, to name only a few.

The development of these skillsets should be at the centre of essential learning experiences. As the following examples of my 'classroom laboratory', this is the environment I attempt to create. This laboratory assists in developing the specific attributes and proficiencies of what is referred to in this collection by Arvanitakis and Hornsby (in this book) as the 'Citizen Scholar'. Extending this even further, I would argue

that teaching requires the imagination of a classroom as a 'temporary autonomous zone',[6] a space of materialising a future citizenry mutually created across the divide of teacher and audience.

In the rest of this chapter, I sketch out a selection of six case descriptions of my experiences in the classroom to then locate them both in the context of political analysis and within the theoretical frameworks I employ. I theorise my teaching experiences with Spivak's understanding that '[...] autobiography is in no way perceived as a narrative of the self but as an artificial construct that helps the critic to allude to her cultural context without positing a secure, knowing, narcissistic "I"' (Hiddleston, 2010: 169).

Case study 1: From resistance to rebellion

'From Resistance to Rebellion. Black Militant Women in the '60s and 70s and their Historical Legacies' was one of many seminars I taught in the mid 2000s at the Ludwig-Maximilians-Universität (LMU) in Munich. It was an undergraduate seminar with about 25 students.

We looked at how Black[7] women influenced cultural phenomena and sociopolitical struggles in the 1960s and 1970s in the United States. In this class we explored women's *her*story in its traditional approach to biographies and women's live experiences as developed in the 1970s but we also critically explored the conceptual frameworks we encountered, such as notions of violence, militancy and terrorism and how those are linked to power, language and knowledge production.

It was structured like an ordinary seminar which included collective close reading of texts with my input and context. We also included a new form of assessment: students were required to choose one text each week and not only to analyse it and structure a discussion for the entire class but also to become an 'expert' of a particular text in the sense that they looked up persons and concepts referred to. They also had to develop possibilities as to how the knowledge gained could be relevant for today's situations and struggles.

The quickly growing class archive was collectivised within a framework of an editorial board. Each student was addressed as a reporter, who posted his or her findings, questions and articles on a website which students themselves developed and named Erase–Racism. As I have neither the technical know-how nor the time, we collectively brainstormed a structure in relation to content organisation and in relation to non-hierarchical, participatory models of redistributing knowledge (some computer knowledge is always available) and shared decision-making.

I eventually released the students into the responsibility of making this work and only checked in casually. I assessed student's general in-class participation, their performance as a text 'expert' and their final written assessment which was also shared on the website. The participation in the collective process was not part of the assessment and lived of the enthusiasm of wanting to share proudly one's intellectual achievements and occasional political activities and ideas.

Case study 2: Pink letter campaign

The 2008 *Pink Letter Campaign* resulted from my class *Feminist Debates* at the University of the Witwatersrand. South Africa celebrates 'Women's Month' annually in August. WITS University ran a programme of business-centred events that focused on 'meet powerful female CEOs', presented on pink banners referencing the design of women's sport clubs or beauty studio advertisements. A group of my students analysed the content and its visual representations, disclosed the underlying gendered and hetero-normative assumptions and contrasted this with the violent and unjust realities of South Africa's gender relations to then formulate what they would like to see happening in the context of women's month on campus.

A letter outlining the concerns of the students was drafted and sent to the Dean of Humanities. The points raised were taken seriously by the sympathetic Dean of Humanities, and for the duration of his appointment he made it his personal responsibility to ensure that the institution had a progressive women's month programme, developed in collaboration with students.

Case study 3: Transgressing the ivory tower

When Caster Semenya won a gold medal in athletics for South Africa in the 2009 world championship, a global debate about her sex status exposed the deeply rooted norms operating in international sports circus, the media and South African societies. That gender performance and sex might not be coherent sparked humiliating medical processes and public discussions.

After long and intense class discussions in the light of normative body politics unfolding around us, some students of my undergraduate course *Feminist Theory and Practice* initiated a working group named *XXwhy?* The group organised a public round table discussion in which 50 representatives of the media, civil society activists, colleagues and

students participated. The students invited me to give a brief keynote introduction to frame the event with their own presentations on issues they considered important in the debate: sex as a continuum, and not a binary, notions of 'hermaphrodism', intersex and transgender as discussed by gender non-normative persons themselves.

They then chaired the public round table discussion where they lobbied for a more complex discussion amongst activists and scholars, and a more nuanced reporting through the media with respect to 'body politics' around gender, sex and sexuality. In the end, they distributed a self-made media pack with materials: a glossary, a link list and a selection of essays and manifestos as their intervention into the public debate.

Case study 4: Cross-course liaising

My postgraduate course *Violence Identity and Transformation* deals with nation building processes. The main interest is, how notions of gender (often deeply racialised) are inscribed in national discourses and iconographies. Another of my postgraduate courses, *The Politics of Race, Representation, and Memory* (case study 6), explores whose memory is represented and how, and who is silenced; how do societies memorise past regimes of violence and how does this inform the understanding of current sociopolitical phenomena. A key focus is on the different transnational topographies of memory in the context of the Shoah, the genocide in Rwanda or against the Nama and Herero in what was then South-West Germany and current debates around the memory of transatlantic slavery. These memory cultures were presented in the context of the emerging field of intergenerational trauma studies – which is a point of fascination and importance for young South African students.

With both courses we did a one-day excursion to the neighbouring city, Pretoria, visiting the *Afrikaaner Voortrekker* Memorial and the post-apartheid memory site *Freedom Park*. I asked students to liaise with the department to arrange a vehicle and with the two sites to organise a guided tour for each site. The course on memory politics accomplished a public exhibition – a project I will elaborate in case study 6.

Case study 5: Student collectives and social media usage

A colleague and I managed to receive substantial funding from Wits University in 2012. Inspired by the expressed need of students for more support of independent student-driven initiatives, we organised a faculty-wide public meeting out of which five student collectives and

a guiding minimal consensus for cooperation and internal organisation resulted, including agreement on the process of spending funds.

One collective was the group of honours and postgraduate students I supervised. This group organised a writing retreat and used some funds for a campus-wide campaign they named *Queerell*. They designed in collaboration with a professor from the School of Art T-shirts with statements such as 'Another daughter was raped this day'/'Another daughter was killed this day', and accompanied this with a social media campaign. A T-shirt giveaway event was organised at a prominent point on campus. They asked passing-by students to wear the T-shirt together with a poster and on which each student wrote a personal statement about gendered violence. The group took a photograph of the student with his or her statement, posted it on a Facebook account they had established previously and asked the student to get as many likes as possible for his or her photo and statement in order to become the 'face' of the campaign. The ten best and most liked statements would then be printed on posters and distributed on campus. The group interfaced with the artist, T-shirt printers, the student body of the other four collectives, social media, printers, students, media and so forth. Debates were how to achieve maximum distribution of the message, an emotional buy in and identification in spite of limited resources.

The initiative was so successful that postgraduate students of the following year continued the programme and eventually included undergraduate students from the feminism class: Visit *queerell 2013!* On Facebook.

Example 6: Working across disciplines[8]

This postgraduate seminar not only included the field trip outlined in case study 4 but was run partly like a workshop. In addition to the traditional close reading of texts, students were asked to develop over the semester an exhibition looking at memory politics on campus.

Like an editorial or curating collective, they had to develop an overall theme, narrative and design concept into which they fed their individual research projects. They had to develop these projects from scratch, which entailed finding a question or problem to investigate and to then present. I initially facilitated this process by connecting them with colleagues in the School of Arts, who directed them further to students from the curating programme.

In the end, the 11 students formed four subgroups (catalogue, venue and organisation, finances, public relations) and organised an acclaimed

exhibition, accompanied by a catalogue, posters and media reports in which they presented a cross section of areas including, for example, a critical investigation of the university's transformation efforts in relation to race and gender, student notions around inter-racial relationships and the fading memory of the then one-year-old scandal around sexual harassment on campus.

Pedagogy and critical theory

Gramsci's ideas about revolutionising educational systems beyond the bourgeoisie can be traced back to reformist thinkers of the eighteenth and nineteenth centuries, who, in an anti-monarchist stand, aimed to establish an educational culture for bourgeois citizens. Historically, two conflicting approaches shaped German educational politics and concepts. Hermann Hesse's novel *Unterm Rad* (1906) describes well the Prussian style, militaristic and authoritarian method of drumming knowledge into students. Emerging reform pedagogics, inspired by Heinrich Pestalozzi, Ludwig Feuerbach, Fridthjof Grundtvik, Wilhelm von Humboldt et al.,[9] were opposed to a narrow focus on the exclusive transfer of knowledge within a given class. The anti-monarchist approaches focused on agency and not on force, on humanist ideals versus technical pragmatism, on moral development and a holistic approach to grow human nature and an active citizenry.

The demands to radically reform public education aimed to accommodate the newly emerging quest for post-revolutionary individual liberties of an emerging bourgeois citizenry. This included the reform of curricula, the professionalisation of teacher trainings and assessment forms in the newly founded public education system based on a broad general education.

Swiss Heinrich Pestalozzi, a thinker during revolutionary times of the French Enlightenment, demanded a holistic approach to moral development and the growth of human nature instead of focusing on technical pragmatism in education. His anti-militaristic approach to schooling was based in a humanistic universalism, including the promotion of interdisciplinary which would finally enable the change of professions and liberate feudal subjects to become citizens. Universities were supposed to be institutions of academic freedom, academic self-management, with the purpose to serve the state and the community (not an aristocratic or clergy upper class) and being at the same time independent of the state. These envisioned institutions reflected the ideals of emerging bourgeois subjects seeking individual liberties,

self-realisation, claiming agency, freedom of choice and to be no longer bound in a rigid estate-based society and its exclusions.

Since then, much has been written about the supposed emerging notion of a supposedly universal citizen who was ultimately constructed as male, white, and property holding, a subject in an institution which was at least in relation to its class status at the centre of Gramsci's critique. Feminists and black and lesbian, gay, bi-, trans-, intersexual, queer (LGBTIQ) people extended this critique. Eventually, academic institutions became more or less responsive by (semi-)institutionalising new disciplines and/or fields such as critical race theory, postcolonial studies, feminist and gender studies and queer theory, but, overall, this did not result in a radical systemic change.

Today, it seems that the most substantial change at least in a German context was a top to bottom and not a bottom to top transformation: the Bologna process of the so-called European harmonisation of higher-learning institutions. The critique of this process was and is manifold and targets next to other aspects the corporatisation of public institutions and the dismantling of a principle inherited from earlier academic reforms: Humboldt's vision of a 'unity of research and teaching', which was the basis of a highly valued mentoring relationship between students and universally trained scholars. This principle was transformed into a coexistence of research and teaching with highly paid researchers with very limited teaching while many low-paid scholars teach masses of students and have little time to attend to their own research.

In the mid-2000s, when I worked at the America Institute at the Ludwig-Maximilian's University in Munich, we still had new courses every semester next to a few obligatory introductory undergraduate courses. We were free to research a topic of our interest, publish our findings and design a seminar. This allowed for teaching which reflected latest state-of-the-arts research and contemporary phenomena and public controversies immediately. As such it enabled the application of newly produced and acquired knowledge for the purpose of intervening in such debates in multiple ways. The moving away of the 'empty vessel' approach to teaching and notions of universal truth can be seen in the context of political movements emerging in the 1960s and specific philosophic developments.

Such interventions are in line with critical theory as developed by scholars of the Frankfurt School. Critical theory promoted social change and located the history of sciences in the context of capitalist social formations. Traditional sciences such as theoretical and positivist philosophy are critiqued as trapped by the dialectics of enlightenment,

therefore accepting social conditions as factual and not as socially produced and as such reflecting domination and inequality. Michel Foucault takes the criticism of humanism as, for instance, discussed by Max Horkheimer and Theodor W. Adorno in the 'Dialectics of Enlightenment' (1947) much further: knowledge production and claims on truth and reason themselves are studied as practices of specific power relations to domination. As a post-structuralist, Foucault argues that there is no metaphysical essence available for the human subject; it is not the origin of truth and knowledge, as it is always inscribed in language and its signification processes. He challenges the foundations of humanism, seen '[...] as the dark side of enlightenment, as the totality of all those discourses who are implying that even if the occidental subject is without power it can be confident and of sovereign in its appearance. For Foucault humanism is a secularisation of idealism, there is no ahistoric norm, no objective but only relative truth' (Raceviskis, 1974). In this view, humanism and its principle of universality produces counter-emancipation or forms of normativity embedded in discourses of 'freedom'.

The relative laissez fair of my educational background allowed for the merging of different intellectual traditions of knowledge production and sharing: an interdisciplinary *bricolage* approach. It assembles the scholars of the German Frankfurt School/New School, New York, who developed critical theory during the Second World War and in the aftermath of the Holocaust. They intersected German philosophy with social psychology and read sociopolitical and cultural phenomena, specifically collective forms of violence, through psychoanalytic concepts. It also assembles US interpretations of French post-structuralist theory production, especially in relation to gender studies, critical race theory and postcolonial studies; and it was informed by British cultural studies, particularly in relation to methodological approaches towards the trans-disciplinary analysis of the intersection of class, race, gender and sexuality.

My interests are anti-identitarian but nevertheless rather difference conscious than difference blind approaches, arguing on one side that race, gender and sexuality are social constructs but stressing on the other side the social materiality of intersecting regimes of oppression and violence based on these categories. The analytic tools offered by critical race theory, postcolonial, feminist and queer studies do not only enable political agency in times of chauvinistic nation building and the formation of new racisms in post-unification Germany. They also present inherent methodological critiques and fresh approaches

students need in a radically changed environment in order to strive in today's complex societies and/or to subvert hegemonic and normative codes as organic intellectuals of their respective communities. The often-critiqued markers of contemporary education seem to echo early reformist and revolutionary thinkers and their demand for a holistic approach to teaching. As James Arvanitakis has argued:

> We are good in teaching knowledge but not very much so in teaching those badly needed new cultural literacies and skills, given that we teach in a time of disruptions where stringent career paths are and will become even more rare in future.[10]

As teachers we inhibit these complex sociopolitical construction sites instead of simply representing them. For example, how do I teach a diverse classroom in South Africa as a white middle-class scholar from Europe?

Hiddleston describes how Spivak contemplates about her own pedagogic practice as '[…] complicitous duality of power and knowledge that conditions even her own position as teacher' (2010: 170). The tension between complicity and commitment often remains unspoken. Elisabeth Ellsworth (1989) discusses the limitations of critical pedagogy, scrutinising key concepts such as 'dialogue' and 'empowerment' in the context of implicit power dynamics that remain as unspoken as assumptions about epistemological paradigms remain unquestioned (Ellsworth, 1989). Not only differently positioned teachers but also different students do require different skills: coming from a non-urban, non-middle-class background into a city to attend university requires multiple survival skills on different levels. Coming from a privileged educated middle-class background requires thinking outside of one's own narrow comfort zone, the unlearning of privileges in order to be able to connect with the diversity of other realities present in our complex world in meaningful ways.

In order to participate in constantly ongoing and ever changing de- and re-signification processes, I argue that we all need to learn how to 'read' different worlds and to simultaneously take into account not only the limitations of our respective *situatedness* which informs our respective interpretations but also how others are possibly 'reading' us. Contemporary social complexities pose theoretical questions and are at the same time practical pedagogical challenges located within different, but to a certain extent also similar, sociopolitical contexts. How do these contexts inform my teaching?

Critical thinking, inclusive teaching: Practitioner's tools and concepts

In this section, I aim to theorise my own teaching practice in Germany, France and South Africa. My own teaching practice relies heavily on three rather practical elements: first, it is interactive and participatory; second, it works with peer education; and third, it is based on a set of specific ethical and or political considerations. I try to work with an authenticity of the moment instead of being pedagogical: I say what I think and see and what I cannot understand or do not know; I invite students to share their insights with me and others and to formulate different or even contradicting opinions so we can mutually educate us through debate. I work with the emotions and experiences of students as I know or anticipate them and as they share them. The inclusion of students' experiences furthers their identification with the course and its topics and generates the trust that they can speak their mind.

To critically reflect on one's ideas such as 'homosexuality is un-African' or 'being born white into post-apartheid means one has nothing to do with racism' is not merely a cognitive exercise. Rather, it demands that students identify their own underlying emotions informing such ideas. To achieve this, I attempt to draw on a multifold toolset.

For example, I start my feminism classes of up to 100 students with the class moving through space, mapping its own ever-changing majority and minority constellations. I ask a question or state a stereotype – such as 'men should not cry', 'black people are loud', or 'we must leave the past behind and move on' – and then students are asked to come close if they agree and to move away if they disagree. It is most interesting to do this at the beginning of a course and at its end, especially if teaching enables the formation of relationships that make tacit knowledge and attitudes experienceable in order to locate them as elements within supposedly rational arguments. As I teach rather contested topics, I have no use for indoctrination or force causing alienation. I aim to encourage participation and interaction to create a cacophony of positions and productive dissent and complicate simplistic polarisations. This helps me to merge content and form of my teaching: making certain principles such as representivity and pluralism experienceable without being arbitrary.

Teaching becomes more effective when it includes the lived experiences of peers and helps to collectively theorise the narratives of such experiences through multiple disciplinary lenses. These are lessons learnt from health and sexual education since the 1970s as peers

multiply knowledge with a snowball effect in order to question ones own assumptions and stereotyping. It becomes rather a learning assistance in the sense of helping to generate questions and thought processes instead of leading or directing students, and it enhances life skills such as communication, team competency, empathy, listening, productive articulation of critique and cultural sensitivity amongst participants in the class. The above-mentioned classroom examples not only facilitate various inter-group dynamics and teamwork but also enable students to interface with the 'outside' world from a position of entrusted 'authority'. This agency entails responsibility and, consequently, accountability for one's role in a collective process.

A skill that is essential for the citizen scholar is *critical thinking* – and this is at the core of why I employ this cross section of strategies. *Critical thinking* and the deconstruction of essentialisms when learning to 'think about thinking' are linked to the experience of public and private situations. Therefore, as a teacher I cannot remain in an assumed neutral position and claim an Archimedean point of absolute knowledge and truth; this doesn't mean I have to share my intimate inner landscapes; it rather invites the discussion of my own clarification processes when aiming to recognise the forces and processes that shaped/shape my experiences of, my analysis of and my scholarly reflecting about everyday situations. Spivak describes this as follows:

> I believe that the way to save oneself from either objective, disinterested positioning or the attitude of there being no author [...], is to 'recognize' oneself as also an institution of historical and psychosexual narratives that one can piece together, however fragmentarily, in order to do deontological work in the humanities.

> (1998: 6)

This allows us to promote a cultural awareness and capacity for self-reflection. In other words, I practice what I want the students to achieve for themselves: by reflecting on some of my own experiences and thought processes, I generate a space within which students are encouraged to analyse their own and each other's thinking and the multiple assumptions, legacies and agencies inscribed in it. Quasi automatically, students begin to embrace theory as a tool for personal and political progress without feeling alienated by what are otherwise often perceived as abstract and dry formulas or abstruse ideas.

The complexities of today's societies or situations require a multitude of knowledge and perspectives in order to respond to experienced

diversity in constructive ways. As a foreigner, and somewhat an outsider, I learn a lot about myself in each class, and by asking students to explain their realities to me or by contextualising what I believe informs my understandings I make my own inside-outside position and my therefore sometimes limited understanding transparent them. I point out that I might have to offer different perspectives or have unexpectedly similar experiences. The message is that lifelong learning is normal, to not know can be okay, but to lose one's capacity for curiosity and playfulness is a loss of creativity, is stifling and counterproductive to social transformation.

For me, theories of deconstruction teach us how to maintain mental flexibility when questioning notions of identity and difference. Further, both concepts are linked to the production of knowledge and consequently to power. In Spivak's (1994: 9) words, the ' "homeopathic" deconstruction of identity by identity' generates the awareness that there are completely inaccessible areas for me – my attitude in the classroom exemplifies the theory I teach. The void, the missing link is for me as relevant in theorising and teaching as everything I can bring to the table: '...what I cannot imagine stands guard over everything that I must/can do, think, live' (Spivak, 1994: 9). It is my students who are this guard to me, the white middle-class woman from Europe. I am both limited and enriched by my privileges at the same time – this is obvious to me and to them. Knowing and addressing my own limitations enable me to teach students awareness of their own limitations. '[...] to teach the student the awareness that this is a limited sample because of one's own inclinations and capacities to learn enough to take a larger sample. And this kind of work should be a collective enterprise' (Spivak, 1994: 21).

I am not the only one. We all are in some aspects more or less privileged at the same time: poor but heterosexual, black but male, educated but immigrant. The question is, how does one position oneself in relation to these complexities? Am I clumsy or open about this? Do I access my agency of choice? Here, I borrow from the African American feminist scholar bell hooks. She asks us to utilise our privileged positionalities in order to dismantle the very systems which privilege us instead of denying our often, even involuntarily, complicity with structures of inclusion and exclusion, with power. As a German, I chose to work as an antifascist and antiracist, which enabled me to enter – as an outsider – into a dialogue about 'coming to terms with one's collective past' with my black and white students in South Africa.

Conclusion

The respect I have for my students comes hand in hand with a genuine self-interest: at its best, teaching is made up of mutually enriching transactions between an 'audience' and teacher in a given cultural, sociopolitical and intellectual field. Participatory and peer education provides a space for this enterprise. Spivak describes the interaction with an audience, and a large class can become an audience, as mutual and productive when

> an audience is responsible, responding, invited in other words, to co-investigate, then positionality is shared with it. Audience and investigator: it is not just a binary opposition when an audience is really an audience. It now seems to me that many of the changes I have made in my position are because the audience has become a co-investigator and I have realized what it is to have an audience. An audience is part of one. An audience shows one something. That may be indeed the transaction [...] it is attempting to deconstruct the binary opposition between investigator and audience.
>
> (1994: 25)

The transactional character should not tempt us to pretend that we are all in the same boat, that there are no power relations amongst us. As a teacher, I have the responsibility to acknowledge that we are all invested in power and politics in the classroom, on campus and off campus, which need to be discussed and, if necessary, challenged. I might need to be challenged. It implies for me to also '[...] ruthlessly undermine the story of the ethical universal, the hero' – in society at large and in the classroom (Spivak, 1994: 21). The heroic gesture, claimed or allocated, often comes along with being in possession of power and knowledge presented as essential and truth.

I argue that here lies the centre of our responsibility as teachers when forming intense intellectual but non-harmful relationships with students, aiming to transcend our different positionalities in the name of shared intellectual desires within a field of complex power relations.[11] Power is, to borrow from Foucault, '[...] not an institution, and it is not a structure; it is not a certain strength that some are endowed with; it is the name one lends to a complex strategic situation in a particular society [...]. This multiplicity of force relations can be coded [...] either in the form of war or in the form of "politics" ' (Spivak, 1994: 28–29).

In addressing multiple power relations in the classroom, in decoding them with the students, we are doing politics as I am teaching them politics. It is about understanding the processes of meaning making and their relation to power, something they understand immediately if I exemplify it by theorising their actual situation instead of presenting theories of power as abstract content. This approach implies to put me on the line, to open up a discussion of what it means to be or to become an organic intellectual in the Gramscian sense: he or she who does not only describe society but articulates through the language of culture the emotions and experiences of a group he or she identifies with.

Students need to develop this language. As we are interacting, as we theorise our interaction though the analysis of our respective experiences of this particular or of other interactions and as we have a conversation that is grounded in the writings of authors representing different archives (the global North and South), we develop a language which is able to articulate that what normally remains unspoken in more and more precise ways.

Different educational reformers argued the relevance of having a voice, which is based on having a language within which I can express myself and which others hear. This involves practical communication and linguistic politics and includes philosophical concepts, the exchange over disciplinary boundaries and politics of identity and interferes with processes of subjectivication.

Language is often an issue in my classrooms. Some students lack English skills or feel insecure, some lack conceptual language and some students lack in spite of their Oxford English the finesse to not say something they actually do say but do not want to say. This requires constant corrections: do you want to say that women cannot park a car or do you want to say that women are often considered as incapable to park a car? What are the different implications if we speak of slaves or rather of enslaved people – how does it feel differently and why? In South Africa, I can play with my own incapacity to speak what is considered 'proper' English – without accent, without grammatical mistakes, without moments of lacking words. That somebody can stand there and embody an authority not in spite of but because of her linguistic challenges, and who became another tool to exemplify theories of power, inclusion and exclusion, coloniality and decolonisation, is encouraging for those students who are insecure to express themselves in English. This ruptures the smugness of those who fluently express themselves but oversee the historic legacies their language carries. '[…] a mother tongue is something that has a history before we are born. […] We are

inserted into it, and, without intent, we "make it our own". We intend within it; we critique intentions within it; we play with it through sig-nification as well as reference; and then we leave it, as much without intend, for the use of others after our deaths' (Spivak, 1994: 7).

There are many different mother tongues in the classroom, and this is political. This is particularly the case in South Africa with 11 formal lan-guages, with English remaining the main tool of communication and knowledge production – and hence being a marker of class and sta-tus. To embody a decontextualisation of not speaking English 'properly' from signifying individual failure and to recontextualise this within a collective sociopolitical history is enabling for students: a challenge is taken out of the realm of individual shame and transferred into the arena of political agency.

According to Gramsci, this is about finding a language that can explain why oneself and others too feel intimidated by a language or an institution. It aims to generate *critical thinking* by enabling students to deconstruct meaning making and signification processes in relation to power, to critically read societies code systems; this is in my view one of the major legitimacies of existence for the humanities. Politics of change happen when we critically attend to the nature of the institution that is our contractual and, at the same time, social and intellectual space. The trivialisation and disempowerment of critical reason, discussed as a main consequence of the global trend towards entrepreneurial universi-ties,[12] are not only a threat to good teaching but also to social change at large. As such, the politics of ethical teaching should take the complex strategic situation beyond campus, on campus as well as in the class-room, into account. 'History is larger than personal goodwill, and we must *learn* to be responsible as we must study to be political' (Spivak, 1998: 337). For me, this is what good teaching is about.

Notes

1. This is resonated by Hark referring to Wolf Lepenies (1997), who 'argues that the West must transform itself from a culture of instruction to a culture of learning, and that knowledge imports must at last come to exceed knowledge exports.' (Hark, 2014).
2. Cited in Merkens (2004: 1). Gramsci published these ideas in the article '*Socialism and Culture'* in the socialist party paper *Grido del popolo,* 29 January 1916.
3. Intellectuals such as scientists, philosophers, authors, cultural practitioners, but more broadly, all persons who organise and lead social processes, are involved in ideological institutions such as education systems, the media, lobby groups, to name only a few, where they produce and secure societal

hegemony, argues Gramsci. To achieve or secure hegemonic power, you have to assimilate these intellectuals, and this is most effectively done if a group produces its own organic intellectuals.

4. Gramsci's conceptual framework at the time was based on a class analysis. He referred here to the bourgeois versus the working class. I transfer this to a broader understanding of groups, communities and collectives whose positions form (fractured, temporary) identity(ies) based on aspects of shared as well as distinct experiences within specific relations to power. This includes, for instance, students, the youth and immigrants.

5. I would like to acknowledge James Arvanitakis from the University of Western Sydney, who summarised these newly required skills in a workshop held in October 2014 at WITS University.

6. See Hakim Bey's concept as discussed in Schuhmann (2014).

7. Black is understood here as a political category and as such does not refer to physical characteristics or phenotypes. Capitalisation of the letter B has been developed by different antiracist struggles as a visual 'stumble stone' and to remind us about this understanding when reading the word 'black'.

8. In my text: Schuhmann, Antje (2015), ' "Transdisziplinarität als Lehre der Inklusion": Thinking about Thinking', in *Quaderna*, Vol. 4, I develop this text further with a focus on inclusive teaching and transdiciplinarity.

9. It seems that many past (and current) white, western male thinkers, in this case W.v. Humboldt, do have a downside to their thinking framed as progressive. His ambivalent attitude towards a colonial racist discourses and gender relations should not remain unmentioned. Next to these now problematised aspects of this person, he and his brother symbolise today a cosmopolitan German, in the tradition of European ideals, standing for curiosity, open-mindedness. Currently there is campaign organised in Berlin to rename Humboldt University.

10. James Arvanitakis stated this in a workshop held on October 2014 at WITS University.

11. I am stating this particularly in the context of a crisis many universities face in relation to sexual harassment acted out by academic staff towards students. To form such intimate relationships in the sense of intense intellectual exchange versus romantic and/or sexual requires high levels of responsibility precisely in the context of unequal power relations (Schuhmann, forthcoming).

12. For further information about the term see Hark (2014). Hark's text is based on the project 'Nach Bologna. Gender Studies in der "unternehmerischen Hochschule" ' (After Bologna: Gender Studies in the 'Entrepreneurial University'), carried out with Angelika Wetterer as part of the research programme Entrepreneurial University und GenderChange: Arbeit – Organisation – Wissen with funding from the German Research Foundation DFG, the Austrian Science Fund FWF and the Swiss National Science Foundation SNF (www.genderchange-academia.eu).

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14

Cultivating the Cultivators: Peer Mentorship as a Means of Developing Citizen Scholars in Higher Education

Catherine Duncan

Introduction

This chapter responds to the call to re-imagine higher education in a time of disruption and the decline of content's primacy in a mediated world. It starts by proposing that we expand the focus of who we consider to be the students we prepare for work and scholarship. I argue that postgraduate peer mentors are simultaneously both valuable and vulnerable members of the community of practice (Lave and Wenger, 1991) within the university but they are often overlooked as newcomers to teaching practice. This is a lost opportunity, and in this chapter, I outline a project that explored how peer mentors learn to teach without formal pedagogic instruction. This project was premised on Lee Shulman's (1987) idea that Pedagogic Content Knowledge (PCK) is a more desirable attribute in teachers than content knowledge alone.

Pedagogic Content Knowledge has well-established credentials in educator development and marks a shift away from the reification of content as the central focus of education. In outlining this approach, Shulman claims that the knowledges demonstrated by educators are of a special order: content is galvanised by the teacher's various knowledges, experiences and observations. PCK offers a conceptual framework to bring the pragmatics of teacher training into articulation with the calls by Arvanitakis and Hornsby (Chapter 1, this book). In so doing, it is a chance to reimagine the purpose of the university, not as a content delivery system, but to make a turn towards educating the Citizen Scholar.

I am the coordinator for a large arts course that relies on teaching by a team of people who have not taught before. As such, my interest is in the members of the university community known variously as tutors, peer mentors or teaching assistants. These are increasingly crucial members of the teaching teams in the contemporary university. Peer mentors are defined as undergraduates or recently graduated postgraduate students who are assigned the role of helping more junior peers clarify concepts, process material and prepare for assessments. In our institution, peer mentors are typically students working towards a higher degree and concurrently providing casual or temporary teaching services to their home department either for remuneration or as a condition of a bursary or scholarship.

It is a Janus-faced responsibility being a peer mentor. The students and the institution hold them accountable as teachers while they are still learning to teach and testing out the role of the teacher; a role they may have had no intention or aspiration to when starting their degree. Postgraduate peer mentors find themselves at the confluence of several critical considerations in higher education. Not only are they at the front line of the day-to-day activities of teaching, marking, student support and academic development, but they are also potentially future academics.

Peer mentors are simultaneously expert and novice. They are engaged in advancing research in their disciplines; yet, they are novice teachers with little or no teaching experience and limited exposure to theories of teaching and pedagogy. They are seen by the institution as indispensable given the demands of large-class teaching and limited staffing and yet we hope they will graduate within a year or two knowing they will take their newfound skills and experience with them. That being said, generally we do not see it as part of our disciplinary responsibilities to teach peer mentors how to teach. They are still students and the institution sees them in terms of postgraduate numbers, supervision allocation and coursework resources. When they step into the role of peer mentor, however, the fact that they could (or perhaps should) be taught to teach is missed.

My argument is straightforward: when we fail to think of postgraduate peer mentors as students, we miss an opportunity for long-term and widespread innovations in teaching and learning. After all, each peer mentor we educate could have a career teaching in higher education and in turn influence scores of more people. Intervention at the point at which these future teaching staff are taught to teach foregrounds the attributes and skills of the Citizen Scholar.

The postgraduate peer mentor in the contemporary university

While disciplinary specialisations may not prioritise peer mentor training within their communities of practice, institutions recognise the need for this and often offer postgraduate peer mentor training. Most universities have programmes of varied intensities and use different approaches to preparing peer mentors.

There is a substantial literature detailing different tools, techniques and frameworks for peer mentor development; however, in both research and practice, many of these are limited to dedicated, centralised resources removed from the daily practices and interactions within departments. These training opportunities are a pedagogical resource that peer mentors draw on but this should not be the only site where they are engaged with as learner-teachers.

Over the last three decades, postgraduate peer mentors have become an important fixture in higher education. The underlying changes in universities due to larger numbers of students and broadening access to tertiary education makes postgraduate peer mentors necessary for the continued functioning of undergraduate teaching. The pragmatic and economic reasons for peer mentors becoming more central occurred in parallel with a widespread change in pedagogy that looked towards student-centred academic literacies as epitomised by the work of Biggs (1999) and Ramsden (1992). In this context, concerns arose that postgraduate peer mentors, with limited (if any) teaching skills, were teaching some of the least experienced and most vulnerable students.

In South Africa, many of these same concerns coincided with the complexities and difficulties that characterised (and continue to attend) the post-apartheid era of access and transformation of higher education. Peer mentor development in South Africa was, and remains, critical to supportive and meaningful changes within the student cohort as well as transformation of teaching and learning practices. Clarke at the University of Cape Town (1998) and Potter et al. (1998) at the University of the Witwatersrand explored the risks and advantages of recruiting postgraduate students as staff and human resources to cope with small group teaching. This research identified several reasons for paying keen attention to peer mentors as lynchpins for change and transformation in the university.

Offering postgraduate peer mentors training which foregrounds student-centred learning is helpful not only for the students but also as a way of ensuring greater penetration of these ideals within the

institution. If we consider peer mentoring as an academic apprentice-ship, then this training is a method of induction and socialisation of potential future faculty and academics from the postgraduate pool. In the drive for a more inclusive university, training is essential for peer mentors to be effective teachers when dealing with the difficulties of teaching students with diverse and varied English language capabili-ties, levels of preparedness for tertiary education and socio-economic difficulties of being the first in a family to navigate higher educa-tion. By addressing issues of language, access and staffing, peer mentor training engages with the ongoing drive towards transformation of the institution in redressing past inequalities.

Underhill and McDonald (2010) propose that tutor (or peer mentor) development needs to take into account the specialised pedagogical role they play and the pressures under which they operate. Davids (2014: 338) asks whether existing peer mentor programmes in South Africa are 'fit for purpose', given the additional challenges of increasing demand for university places coupled with inadequate academic preparation in the school system and the lack of concomitant increases in staffing in faculties.

Much of the literature relating to peer mentor development discusses the range of programmes or frameworks that aim to improve skills or training. These models seem to have two elements in common: they reiterate that novice teachers need time and help to gain proficiency and emphasise the institution's concern for first-year students exposed to inexperienced peer mentors. More recently, there has been an emerg-ing trend that strives to complicate these ideas with the observation that the peer mentor occupies an ambiguous and ambivalent role. This per-spective resists a naïve or simplistic search for solutions or tools that will bring about envisioned shifts in teaching practices. It also contests the reductive models that propose 'fixes' for the 'peer mentor problem' and seeks different ways to position peer mentors other than the discourses of teaching quality and institutional risk.

If one conceives of this moment of 'learning to teach' as being about more than simply equipping the postgraduate peer mentor with a set of tools for classroom practice, then this becomes an ideal juncture for engaging with the attributes and skills of the Citizen Scholar includ-ing critical thinking and teamwork. While it is not automatically the case, learning to teach in higher education has the potential to set up questions of institutional culture, people-centred design decisions and social justice regardless of what professional and social avenues are taken after graduation. Furthermore, aside from their own cultivation as

Citizen Scholars, the peer mentor has a central role to play in modelling and shaping the learning experience for the students they come into contact with.

The peer mentor development project

These ideas were formative in conceptualising a postgraduate peer mentor development project piloted in 2012. The mentors who participated in the study were new to a teaching role. They were responsible for small group tutoring once a week in a large first-year arts and cultural studies course.

Jawitz (2009: 613) holds that teacher development in higher education requires a different emphasis: a shift of focus to 'supporting relationships within communities of practice that encourage the sharing of understandings and negotiations around the distributed knowledge of practice'. Echoing such an approach, Knight et al. (2007) suggest the discourse regulating the pedagogic traditions in any institution flows through the system of relations and is not the preserve of discrete moments of training. Therefore, the project offered the peer mentors a degree of agency in making choices about what was taught and what was assessed, what skills were prioritised and so on. Using the task as a method of elicitation, I wanted to understand the knowledges that the peer mentors were using to justify the choices they made in their material and curriculum developments.

The group of peer mentors who were elected to participate in the research project was tasked with:

- planning a set of two 45-minute tutorials for consecutive weeks;
- preparing the materials including a lesson plan, tutorial worksheets for students and any other resources for the classroom activities;
- designing an assessment based on these tutorials and preparing the brief and marking memo for colleagues; and,
- running the weekly peer mentors' meeting to brief those who had not been part of the design process.

The participants were typical peer mentors: high-achieving postgraduates contracted to undertake teaching in return for financial compensation or as a condition linked to a bursary or scholarship. The participants had extensive content knowledge of the field in which they were teaching but had limited pedagogical knowledge. Their first and only engagement with teaching methods had come in the semester prior

to the project in a 10-week, once-a-week training programme run by the centralised teaching and learning unit in the faculty.

The participants gave their permission to record their planning. These sessions of collaborative planning allowed for a supported instance of peer learning for the participants themselves. In addition, it allowed me to follow along as they thought out loud and verbalised their suggestions and decisions. This had the advantage of limiting inaccurate recall and post facto reasoning that often bedevils research when participants are asked explain their choices or actions. The lecturers, coordinator and non-participating peer mentors all endorsed the lesson plans and the assessment task as useful, well conceived and well pitched in terms of content and pedagogical requirements. There were some suggestions for changes, for instance, the participants had overestimated the amount of work it was feasible to complete in a 45-minute period, but otherwise the tasks and assignment went ahead as planned. The students managed the assessment task well and the resulting submission rates and marks were in line with those for the other assessments for the term.

During post-project discussions, the consensus was that the project was a success. The participants were generally happy with their design of the lesson plans, materials and assessment. They reported that they especially enjoyed the opportunity to make their mark on the course although they also commented that it surprised them that this aspect of teaching took so much thought and work. The other staff teaching on the course were impressed with the rigour of the planning and found the new case studies and activities refreshing and noted how well the students had responded to these changes. The project had yielded a learning opportunity for the undergraduate students in the course, but more essentially, the participating peer mentors.

Promoting PCK as a challenge to the privileged place of content

Arvanitakis and Hornsby (Chapter 1, this book) put forward that the distributed networks of knowledge that characterise the Internet effectively demands that we rethink the model of the university as a repository that disburses knowledge via the mechanism of the lecture. If a teacher is simply a vector for information distribution, then the university is obsolete. Shulman's model shows that quality teaching (irrespective of whether it is in primary schooling or higher education) is about far more than content expertise. While accessing information is becoming easier

and easier, evaluating and processing content are a much higher order of skills.

PCK suggests that content is not paramount but instead is one dimension of a teachers' knowledge which is better characterised as an amalgam of knowledges. Shulman rejected the traditional conception that held that what one taught (content knowledge) and how one taught (pedagogical knowledge) could be distinct. PCK was developed as a way of understanding how novice teachers acquire the kinds of knowledge that differentiates effective pedagogues from content experts. PCK brings a fresh perspective to postgraduate peer mentor development. It problematises the dominant model of training peer mentors that sets up generic pedagogical training as remote from the disciplinary content. Furthermore, PCK provides a rubric to factor in the complexities and constraints of institutional context. It allows us to ask what knowledge sources peer mentors typically have at their disposal and provides a means to trace how they deploy these knowledges.

This gives us some concrete points of departure to help peer mentors enrich and deepen their thinking and practice of transforming Content Knowledge (CK) into Pedagogical Content Knowledge (PCK). Shulman's model promotes teacher knowledge as a fusion of knowledges mobilised for a complex audience of learners and with a particular instructional purpose in mind. He proposes that these knowledges emerge from a range of sources: the scholarship inherent in the disciplines from which the content comes; the material context and constraints; research into education and its related fields; and the teacher's own experience or as Shulman terms it, the 'wisdom of practice' (2004: 93).

Shulman positions PCK as a transformative or alchemical process that activates content. The teacher or instructor is an agent who goes beyond understanding subject matter. Instead, she must 'elucidate subject matter in new ways, reorganize and partition it, clothe it in activities and emotions, in metaphors and exercises, and in examples and demonstrations, so that it can be grasped by students' (Shulman, 1987: 13).

For Shulman, the work the teacher does is an active transformation of content by means of three processes: organisation, representation and adaption. As the novice teacher works with ideas determining sequence, priority and emphasis, she is dealing with problem solving and systemic constraints. Class time, number of students, resources available, the material that has gone before and the demands that will follow are inseparable from critically evaluating content and traditional presentations. Simultaneously, the novice teacher needs to find ways to 'clothe'

learning in activities and metaphors – a demand that goes to the heart of creative, people-centred thinking. Developing tasks and activities (whether for assessment, in-class or illustrative purposes) calls on what the teacher knows about her students' strengths and weaknesses, their interests and lacuna of knowledge to ensure that tasks are appropriately scoped and pitched while still targeting learning priorities.

Learning to teach through the lens of the citizen scholar

In this book, Arvanitakis and Hornsby position the Citizen Scholar as the integration of scholarship and engaged citizenship: that scholarship arises from engagement as a citizen and that citizenship is inflected with the insight and rigour of critical thought and investigation. This turn towards the Citizen Scholar is inseparable from institutional culture; in other words, a move towards educating the Citizen Scholar is at the level of a cultural practice rather than a policy, classroom management inter-vention or change of course content. In developing emergent PCK, the processes undertaken by the participants in the project demonstrated learning engendering the attributes and skills of the Citizen Scholar. The skills and attributes deployed while converting content into teachable materials and in turn communicating these ideas in the classroom were essentially problem-solving activities. They were responses to tangible needs and attended by real consequences with real risk of failure. They demand skills allied with *creativity* and *innovation* and foregrounded *critical thinking*, *problem solving*, *team work* and a sophisticated level of '*systems thinking*'.

   In their decision-making, the participants relied on five main sources of knowledge based on a mix of: familiarity with the institutional pro-cesses; their own classroom experiences; content expertise; observations; and personal beliefs and values about learning. Most commonly, the participants based their decision-making on their perceptions (valid or not) of 'how things worked' in the course and school as a whole. They were often constrained in their decisions by their understanding of insti-tutional authority. The participants relied on their own experience as students or from previous teaching, including, remembering instances of enjoyable or effective teaching or its opposite.

   For example, they included case studies they recollected as being useful in thinking about a topic or reading material they consid-ered important or informative when they had been undergraduates. The participants' beliefs and understanding about learning were often foregrounded. They frequently articulated an explicit focus on what

learning should be achieved or what strategies should be deployed. Many of these choices were underpinned by what they observed as being the practices of more experienced instructors, the training programme they had attended as well as comments gleaned from meetings and casual conversations. To a lesser extent, the participants drew on their observations and knowledge of their students. This was evidenced in the form of explicit reference to the students that they had taught, both in the form of anecdotes and generalised statements drawn from classroom interactions and marking papers. Finally, the participants deployed their content expertise as postgraduate researchers in their fields. In these instances, they focused on the canon of their disciplinary areas; where this should be abandoned or challenged and different case studies. Sometimes content was justified as useful to communicate ideas or in its own right as noteworthy and significant content for a student of the discipline to be exposed to.

The project required the participants to work as a team. They had control over the lesson planning and assessment development but these were materials, teaching guides, assessment briefs and marking memos that the entire peer mentor team would use. Aside from needing to reach consensus, the participants needed to prepare and pitch their interventions to the rest of the group who could either agree to try the new materials or default to the resources already part of the course work from previous years.

The original course resources asked students to engage with several examples of art and popular culture that were set up to interrogate how the ideas of truth, evidence and testimony are represented and encoded. The participants maintained that the conceptual framework for these ideas remained an important and useful resource for students making and thinking about the arts. However, they decided that the examples that students were assigned were outdated and remote from the current first years' cultural capital and consumption practices. Starting with a wide range of works (visual, performative and textual) as befits an interdisciplinary arts course, the participants' intervention regarding content evidenced high levels of critical thinking. They critiqued, evaluated and eliminated case studies that did not fit with their carefully articulated criteria that the work should be: relevant and relatable, sufficiently challenging but not daunting, and should be a mix of local and international examples making the task accessible.

While making sophisticated commentary on the politics of the course content, the participants kept a keen eye on the processes and constraints that accompany any activity within an institution. This is

especially true of a large first-year class where decisions impact on hundreds of people's schedules, workloads and eventual academic performance. Here the participants drew on their knowledge of logistics, timing and the larger framework of the course. For example:

> Itumeleng: The next project is due next quarter . . . See this [assignment] was on material from the second quarter.
> Sophie: 'Cos I mean if it is due on the 3rd of October and we come back on the 23rd I think . . . That means they only have about 2 weeks or 3 weeks, remember the last project was the same.

These deliberations relied on close attention to the course documentation as well as previous experience of similar circumstances. The participants took what had been covered in the curriculum into account and how this framed what could be asked in the assessment task. Less explicitly, Sophie relied on her experience to judge what would be a reasonable length of time for a student to prepare an assignment. Later in the discussion, the participants used their collective experiences and observations of their students to guide their decisions regarding the skills they thought should be priorities for the assessment task.

> Carol: Well maybe that could be the focus of the tutorial: teaching them the necessary language how to unpack [ideas from the prescribed texts]. I know that is one of the things we struggle with.
> Sophie: I have a big problem with it – and I notice when . . . they have to summarise concepts they write directly from the textbook. And you'll go 'no but you need to put it in your own words'. But when it comes to putting things into their own words they . . . Or if they put it in their own words it is very generalised and I think that this is what they need to learn.

While the extract above demonstrates participants engaging with the desirable attributes of *reflexivity* and deploying shared and collective experiences in decision-making, these tend to be limited to their experiences as teachers. One of the motivations for peer mentors in higher education is the hope that they will bring their own diverse experiences as students to bear in their classrooms. This is proposed as one way to help students feel supported given the variety of their backgrounds. What was apparent from this project was, despite having a group of participants with diverse educational, language and disciplinary backgrounds, the participants seldom used their own experience as students

to assist in their decisions. In other words, despite this kind of experiential learning situation encouraging *reflexivity*, this is something that would need to be actively cultivated since it seems this is not an obvious resource for new teachers to draw on.

Later when reflecting on their experiences in teaching and assessing material they had designed, the participants shifted towards a reflexive engagement with their work. While they were generally happy with the work they had done, they were despondent about what they perceived as a lack of enthusiasm and performance by the students in response to the assignment.

> Itumeleng: I am disappointed but like I say, I loved our assignment, I still love our assignment. I am proud of it. I just wish that from the student's point of view, because like I said from the beginning we were so passionate about their experience of the material we put together. From the marks it suggested that it wasn't as exciting as we thought it was. To the point of being [where the students said] 'Oh f–k it! Let me do it the night before' as opposed to 'Ooh let me work on it 2 weeks before!'
>
> Sophie: And definitely I noticed when I was teaching those tuts, those groups were so excited and there was debate and we went over time and it wasn't like my normal tuts when we are over time everybody starts packing up, they just kept debating and so when I saw the drafts I was like well …
>
> Itumaleng: where did it all go?
>
> Xolani: where did it all go?

In objective terms, the project was a success. The pass rate and submissions rate for the task designed by the participants was slightly up from average. The evaluation from non-participating staff in the programme was that the resources were productive for the tutorial sessions and the assessment rigorous and fair.

The introduction of this innovation was a success in many ways, including improved pass rates and engagement, but the students were disappointed. Highlighting the old tropes of academia, the peer teachers blamed the students for a lack of engagement, failing to notice the increased connections and also the role of curriculum design in this instance. In future iterations of this project, this would be an opportune moment to introduce some pedagogical theory to help the novice teachers make sense of this phenomenon without defaulting to discourses of student deficit and apathy. Additional cycles would have

provided participants with a chance to adapt and develop new material in reaction to their observations. However, if this was the case, the peer mentors would effectively be members of the teaching staff rolling out and renewing the curriculum from year to year. At the end of the project, all five of the participants went on to positions at either tertiary or higher educational institutions. Several years after completing the project, four of the five participants are still actively engaged with teaching as part of their responsibilities.

Conclusion

This chapter argued that re-imagining the peer mentor role and identity within the institution has the potential to yield significant change. When we view peer mentors as students, it becomes part of our mandate to ensure that they are receiving the kind of innovative and quality education that we aspire to provide all our graduates. Re-thinking peer mentors as students means that the frame of reference changes. No longer are they a risk to quality teaching that needs to be mitigated and managed nor are they a high turnover and resource-hungry temporary staffing solution. Instead, they are change agents with a rapidly multiplying effect as they take on teaching in new courses, new departments and institutions and in turn will train peer mentors who do the same.

To this end, I proposed that Shulman's (1987) rubric for PCK has ongoing value for thinking about how and where we place the emphasis in higher education. Shulman argues that the values and skills at the heart of learning to teach can be seen as transformative and are based on organisation, representation and adaption and not merely content expertise or content delivery. In exploring how PCK emerged among a group of novice teachers engaged as peer mentors in a first-year course, the parallels between the ideal skills and attributes of the citizen scholar and those cultivated in novice teachers became apparent. 'Learning to teach' entails exposure to the kind of experiential learning that is well suited to developing the skills and attributes of the Citizen Scholar as they go on to the world of work or return to the university as future faculty.

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15
Playing with Learning: Childhood Pedagogies for Higher Education

Theresa Giorza

Introduction

This chapter takes an ecologically aware, post-humanist position in relation to the challenge of educating the 'Citizen Scholar' through innovative pedagogies. This means paying attention to the 'more-than-human' nature of our teaching and learning environments (Lenz Taguchi, 2010). This position de-centres the scholar in relation to the interplay of the multiple and changing forces that characterise our learning. Drawing on two 'childhood pedagogies', described in detail below, I discuss the dynamic intra-actions that play out in the classroom between students, teacher, materials, spaces, practices and texts.

In this chapter, I discuss an initial teacher education course in visual art methodologies for primary school teachers. The course is offered in the first of a four-year undergraduate degree in primary education and forms part of a three-part (visual art, drama, music) methodology course which has a timetable slot of two and a half hours once per week. Students move in seven-week cycles between the three disciplines.

In teaching teachers, we are concerned as much with the content of the courses as with the pedagogies we are modelling, with a view not only to the students but also to their own future students. Consequently, the attributes or dispositions supported by our teaching are potentially far reaching. The graduate dispositions outlined in the Introduction to this book, namely *creativity* and *innovation*; *resilience*; *working across teams and experiences* and *design thinking*, are all supported by the described pedagogy in ways that will be explained in detail. Table 15.1 asks questions about how these attributes might be supported by pedagogical practice.

Table 15.1   Citizen scholar attributes and pedagogical practice

Citizen Scholar attributes	Questions raised in relation to pedagogy
Creativity and innovation	To what extent does the teacher/facilitator allow the students to direct the unfolding of the session or course as a whole?
Resilience	To what extent are students expected to be flexible and adaptive? What opportunities do they have to try new things, make mistakes and repeat processes?
Working across teams and across disciplines	What opportunities do students have to work in groups? How well is this group engagement structured?
	Does the course encourage students to explore content across disciplines? Are there links between realities inside and outside the classroom?
Design thinking	To what extent are students called upon to develop social interactive skills? Are relationships equal and systems/processes fair?
	To what extent are students invited to engage directly with physical things and spaces?
	Are students expected to make judgements and give reasons?

My pedagogy draws on two well-established communities of practice: Philosophy for Children (P4C) and Reggio Emilia. Both of these approaches share a philosophical position that sees knowledge/knowing as an active and collaborative project. Both identify the ethical (equality and democracy) as central to the knowledge-making project. Rinaldi (2006), Vecchi (2010), Dahlberg and Moss (2005) and Lenz Taguchi (2010) all write about the learning occurring among adults and children and their ongoing documentations and co-planning in Reggio-inspired preschools. Haynes and Murris (2009) and Stanley (2012) push the boundaries of enquiry-based learning in P4C with children through multimodal games and philosophical questioning. Both pedagogies are strong medicine against the rigid time, space and content limits

of conventional classrooms. Both of these pedagogies motivated the decisions that direct the narrative I present.

The challenge from post-humanism to explore the ways that discourse and reality are co-constructed has implications for any theorising project. In a paper on methodologies in qualitative research, Jackson and Mazzei (2012: 261) describe how they work with knowledge in research, that is, in a way that is 'both within and against interpretivism'. They use data and theory in intra-action, reading the one through the other and vice versa, making new meaning rather than seeking only to 'understand' the data. Rather than seeking to code data in themes and order and align the material in terms of these categories, they engage in processes of 'plugging in' so that through their analysis, they generate new insights. They explain that it is rather like operating different machines that can plug in to one another and transform, interrupt, reconfigure each other. Their thinking comes from Deleuze and Guattari (1986: 4) who caution:

> When one writes, the only question is which other machine the literary machine can be plugged into, *must* be plugged into in order to work.

Concepts, knowledge, discourse or reality only have meaning in relation to other 'machines' that make them work (Colebrook, 2002). In the writing of this account, I will draw out the elements of the two pedagogical approaches that do particular kinds of work in the pedagogy that has emerged from their plugging in.

The childhood pedagogies, when plugged into a higher education classroom create a new way of being teacher and student. The pedagogies are embodied, playful and experiential, using spaces and interactions and intra-actions to enliven dialogue around points of focus. The pedagogical decisions that I made in the execution of my task as teacher of the course were a result of my own exposure to these alternative approaches that foreground enquiry-based learning and the 'emergent curriculum'.

Plugging in different 'machines'

The Reggio approach

A full description of the Reggio system and its history is not possible here, but three key elements of their approach are relevant: *documentation*, *progattazione* and *atelieristas*.

Documentation is a form of ongoing data collection that tracks the thinking, doing, learning of the group in the classroom. It may be verbatim conversations, photographs, video clips, drawings or constructions. The documentation provides a visual narrative of the work of the group and is examined and discussed in group dialogue sessions that are scheduled into the school day. These discussions are taken seriously and may change the course of the programme – which is what *progetazzione* refers to: the openness to planning as the project proceeds. An openness to the emergence or immanence of the enactment means that each individual has the potential to make an impact on the learning programme. This is an essentially democratic approach and is grounded on the value of equality.

Finding ways to allow for the unexpected within formal education contexts is a challenge but perhaps being nimble – which is at the core of the Citizen Scholar – is one of the teacher attributes we need to value and encourage. The ability to remain open and responsive to what emerges from the moment and to respond creatively to possibilities presented is what the *atelierista* is there for. Artists by training, but initiated into Reggio approach, these 'guarantor(s) of freshness and originality' (Vecchi, 2010: 1) distinguish the Reggio approach. When the role was initially created, the *atelierista* would establish an 'atelier' space within the preschool. Increasingly, the *atelierista* is seen to bring a way of thinking rather than a demonstrable art practice.

The *atelierista* also represents another important value held by the Reggio approach. This is their conception of aesthetics as tied to ethics (Cooper, 2012: 295–302). On the simplest level, what matters to us, and what we love are the things that we consider most beautiful: beauty is a connector. We also make things beautiful by giving them care and attention. Vea Vecchi (2010) proposes that beauty and aesthetics should be considered as fundamental rights: a claim she acknowledges is difficult to make in a world so marred by poverty, injustice and repression – something touched on by Arvanitakis and Hornsby in the opening chapter of this book. This attention to taking care and acknowledging the things we appreciate and are attracted to is one that makes us take notice of our relationships as well as our material world in an attitude of appreciation and enjoyment.

Philosophy for children

The work of the Philosophy for Children (P4C) movement is to create a space for people of all ages to play with concepts and ideas in creative, collaborative, critical and caring ways. The approach was initially

developed by Mathew Lipman and Ann Sharp in the United States in the 1960s, and they used carefully constructed narratives and guided exercises for enquiry in the classroom (Lipman, Sharp, and Oscanyan, 2010).

Philosophy for Children and its 'community of enquiry' pedagogy, which cites Socrates and pragmatist philosophers Peirce and Dewey as key influences, is now practised around the world in a wide range of ways, although some of the core principles and practices remain common. While some approaches are more structured than others to scaffold the understanding of key philosophical concepts, the central element deciding their success is the skill and disposition of the teacher, especially in the early stages, and the collaborative commitment of the group as they become a community of thinkers.

The enquiry usually begins with the consideration of a 'stimulus' or starting point and participants think individually of questions that this stimulus raises for them. An image, a story, an object or a film could all be used as this starting point.[1] Then thinking is done in pairs in which a common question is reached either by combining ideas, by choosing one, or through discussion developing a new (third) one. The pairs contribute their question to the group, who then select one question to proceed with. This is done through discussion, analysing and grouping questions, deciding by consensus, negotiation or vote.

The enquiry proceeds with careful consideration of each person's contribution to the exploration of the question. Such teamwork and collaborative thinking, both of which are of central importance to the Citizen Scholar, demand a discipline of responding to peers rather than pushing one's own ideas. Establishing a thinking community is one of the main goals of the pedagogy and the facilitator works hard to get the group to the point where each individual can operate as an equal member of the group. As in the Reggio approach, listening is central and the direction that the session takes depends entirely on what emerges. I do not use the structure of the conventional enquiry as part of the pedagogy as time would not allow this. What I draw from it is the disposition of co-enquirer and the foregrounding of questioning and listening.

The key elements of these two approaches, namely documentation, emergent curriculum, enquiry and democratic dialogue, support and foster the attributes of the Citizen Scholar in ways that will be further elaborated below. As part of the emergent curriculum, I highlight the importance of paying attention to the spaces, objects, materials and physical elements that intraact.

While having been introduced to these approaches in the past five years, and incorporating aspects of them into my practice, I am still the product of a professional practice (art education) that has its own histories and accepted bodies of knowledge. Also, I am preparing teachers to work in a schooling system that has generated an 'arts and culture' curricula that makes certain assumptions about what school art should be. I act within and against this tradition, attempting to re-examine the obvious selections I have made in terms of content, methodology and assessment.

Both the Reggio and the P4C approaches pay attention to the significance of environments, bodies in space and other factors that had been unnoticed in my teaching practice prior to my applying them. This path also offers ways of enacting a pedagogy of mutual respect and responsibility among participants and suggests ways to re-imagine the decentred and 'becoming' 'Citizen Scholar' envisaged in the Introduction to this book.

An undergraduate course in primary arts methodologies

The Senior Primary Arts & Culture Methodology course was introduced as a compulsory first-year course for primary school teachers in the belief that 'the arts' contribute valuable participatory and experiential pedagogies to the teaching of all subjects in the elementary and middle phases of schooling. While the decision to include it was made by the overall curriculum planners, who had experienced similar courses in their own initial undergraduate teaching degrees, the course itself is designed and implemented by arts education specialists. That the course has not as yet been conceived as an integrated 'arts' course but remains as discrete drama, music and visual art modules is evidence of the strong dividing boundaries that disciplines perpetuate; but this is not the focus of this discussion.

A push from university management for better efficiencies put pressure on our arts department to accept higher teacher and student ratios as a matter of course. Our department had a principle of allocating 1 facilitator to 25 to 30 students. This was going to have to change, particularly where first-year classes were concerned.

It was clear that the 'studio-work'[2] model we had been using up until that time was not the appropriate one. My dissatisfaction with our achievements even with the 'small' numbers suggested that some radical rethinking was required. The change from 1 teacher for 25 students to 1 teacher for 50 students was significant in a course that depends on embodied experiential learning.

With each enactment of the seven-week process, I made decisions 'on my feet' that resulted in more engagement from students and more explicit pedagogical moves. A number of the important additions that were made to the programme act as pointers to key pedagogical principles: viewing of contemporary artworks; group activities that involved dialogue and decision-making, as well as group reading activities; a focus on material as a source of meaning making. A detailed description of the course follows in which I flag the elements of the childhood pedagogies that were recruited.

Getting to know the group. We take time to introduce ourselves one by one. I ask the students what they would like to know about their peers. We settle on 'where we come from' and 'what have we been doing in the year prior to coming to the university'. Three students are scribes and write up names and information in separate columns on the chalk board (our classroom space has technologies that relate well to the contexts of most primary schools in South Africa). Names of suburbs and nearby towns, and not-so-nearby places, are written. Some people have had entire careers before coming here, some have earned other degrees, some have switched over to education after starting another course and some are straight out of school. We have mothers and fathers in the class, and political activists. Although time is short in this seven-week programme, it is important that students understand that the learning in this course depends on their individual engagement and their connection with their peers.

Viewing artworks. The second session began with a viewing and discussion of some works by contemporary African sculptors, who use found or waste materials. These include El Anatsui, Romauld Hazoumé, Gonçalo Mabunda, Joseph-Francis Sumegné, Willy Bester and Moshekwa Langa.[3] On each image, I include certain information: name of artist, title of work, date, medium or materials and dimensions – as one would see in an art gallery hanging on the wall next to the artwork. We discuss the title and possible meanings. I provide a short biographical note on each artist and the more commonly shared meanings of the works. I point out that these artists are not using any of the conventional materials that we associate with 'art'. Which are art materials and which are not? What makes them 'art' materials? These artists, in various places in Africa, work on thrown-away packaging, weapons and everyday household items to create whimsical and evocative artworks. These artworks have found favour in high art circles in America and Europe and represent a kind of justice or at least a reply to a historically one-sided conversation. It is important that the content of the course

offers opportunities for widening and opening up new questions and avenues of enquiry as it makes links to bigger issues and problems.

Object stories. Students are tasked with bringing three found/waste objects to class: one object you want to throw away, one object that you no longer have use for and one object that 'asks to come along' (Lind, 2014).[4] Students are assigned to groups and are encouraged to find people they do not know. It is quite easy to assist the process by allowing pairs of inseparable friends to remain in their safe zones while joining a pair of unknowns. I make explicit my awareness of the inherited divisions in our society and the value of difference and diversity for our learning. I draw attention to their future role as educators in diverse classrooms. Past present and future are present in the now.

First the students are asked to link their three objects in a story. They tell each other their stories. They then pool their objects, and considering the objects' meanings, associations and significance together, they try to compose a story using all of the objects. No one can have a pre-prepared story as the objects have arrived unannounced and are in new relationships. Groups are encouraged to listen carefully to all members and, as in a community of philosophical enquiry, try to build on each other's thinking (Haynes and Murris, 2009).

In the following session, groups take turns presenting their stories. We are fascinated at the way the objects have produced fresh narratives and spend some moments considering what the different materials brought to the experience. Some stories are fairytales with clear moral messages, some are soapies with scenes of betrayal and denouement and others are semi-autobiographical tales about a rural child coming to big, bad Johannesburg. All the students are doing a course in 'New literacies for teachers' and are familiar with the notion of 'genre'.

Fear of drawing. Reverting to what is familiar and expected for me and any student who has studied art before, we make drawings of some of these objects. We start with a drawing 'game' in which we rotate our positions, picking up where someone left off and continuing their drawing, before moving on to the next. This immediately undermines the anxiety about 'not being able to draw' but also is a collaborative and playful process that breaks down the silo of individual art making and takes focus away from the product. Over the following weeks, we use different drawing instruments: charcoal, drawing ink, roughly cut sticks and ballpoint pens. I encourage them to first test out the tool. What is it capable of? What kinds of marks can it make? These test sheets are hung up on the walls. The students construct sketch books by sewing together a range of coloured, textured paper and glue on a hard outer cover.

We talk about the slow and purposeful looking that accompanies observation drawing. They are asked to place their object in a position that suits everyone at the table and not to move it after that. They are going to draw the object 'from the position they are sitting in'. Not such an obvious statement. I find that I appreciate the newness of this experience for many of these students, and this enlivens my interaction, my instructions and suggestions. They laugh as they realise how their memories and habits interfere with the looking. For many, it is the first time they have made an observation drawing. I have moved away from any sense that I need to assess the drawings for accuracy or any other value-based criterion. The conflicting discourses of romanticised memory and dispassionate objectivity are in conversation here and neither has the upper hand. In their journals, some students describe their realisation that they are drawing from a seated position and can only see one side of the object.

Fear of reading. We do group reading activities based on the course reading pack. The first reading is about 'What is creativity' by Lindi Solomon (2005). It is only three pages long. Students are asked to read it at home and come to class with one question that it raised, as in a P4C enquiry. Each group gets a flip chart sheet. They share their questions, re-read the passage and discuss the ideas and further questions it presents. They then list the main points of the passage and incorporate important insights from their discussion and present to the class. The scribe is charged with only writing down what has been approved by the whole group. The sheets are hung up on the classroom walls. We look for shared ideas and spend some time on those that need further discussion. When the students return for the next session, the traces of their thinking are there on the walls. Reading academic texts is a skill that eludes many students. This easily accessible reading done collaboratively and as an 'activity' aims to make explicit the process of reading for information while having an internal conversation at the same time.

The second reading is on 'Why teach art' from Khula Udweba (Solomon, 1989) and is a series of interviews with community-based art educators who were part of an art educator training course offered at the Katlehong art centre in the late 1980s (at a time of violent repression by the apartheid state). Groups receive three small cards of different colours. By the end of the session, each group has summarised their findings on the cards: on the yellow, they make notes on 'Why teach art'; on the Blue, they note, 'What do we teach when we teach art'; and on the green, they note, 'How do we teach art?' The names of group members are written on the cards. I take these cards in and type up each group's

responses into one document which each student receives in the following session. The content of the official notes, filtered through different groups of students, are added to the course notes. This is my way of making their own collaborative thinking visible to the students, as it was with the flip charts and the drawing tool test sheets.

Becoming an artist. The final task for the course is the construction of a group sculpture from waste and found materials. I suggest student watch two YouTube videos: one called 'Caine's Arcade' is about a boy who constructs an entire amusement arcade out of cardboard boxes and tape and the other called 'Sculpture inflation' is about a sculpture made of bin bags, tape and a pump for an inflatable mattress. For their own sculpture, they can use things like egg boxes, cardboard cartons, boxes, plastic bags, netting bags from fruit and vegetables, polystyrene trays, yoghurt containers and lids, plastic bottles. They are asked to use the qualities and characteristics of the various materials to find ways to join things. We collect verbs about joining: tie, knit, stitch, insert, wrap, wind, nest, stack. I supply some tools like crochet hooks, needles, pliers and scissors.

The students, working in the same groups they were assigned to on the first day, are asked to delay their decision about what they are going to make. They seem to understand me even though they feel the pull of the predictable and the obvious (initial safe options are: make a car, make a person). I encourage them to play with the materials and only decide on their solution in the next session. I present a range of collected waste materials. I explain how I generate this impressive array of waste: that my friends collect for me and present me with 'gifts' of toilet rolls, polystyrene trays and yoghurt cups on social outings. I suggest they form 'WhatsApp' groups using their cell phones – most already have – so that they can coordinate their collecting. It is in the second playing out that I realise I need to slow down the initial encounter the students have with the waste materials. I need to treat it like a starting point for an enquiry. The students file past the waste objects that I have carefully arranged in piles and rows. I suggest we do this in silence – to ritualise it somehow, to heighten the encounter with this discarded material so easily ignored or taken for granted. Can we see beauty in the objects, in the repetition of the piles of same objects stacked so closely? What draws us to want to touch, or to manipulate?

Course requirements. The course is still part of a three-part sequence (art, drama, music) and conforms to the agreed format. It includes some writing activities that are carried out individually in parallel to the sessions; they are asked to write out the sequence of one of our class

sessions, describing each step and suggesting reasons for each – the same idea of reverse lesson planning as before, but this time the sessions are characterised by a series of short activities, each with a discrete purpose – so much more visible than the previous studio-style pedagogy. Instead of the dictionary of terms that students had to write up in their journals in the earlier course design, I have devised a different 'dictionary task'. I send the students on a treasure hunt for artworks on campus. They are asked to select four kinds of artwork from a list and identify examples of these around the campus. They find factual information about them, as well as plotting their position on a map of the campus. They can also refer to a catalogue I have put up on the e-learning platform that will provide some information about works in the school art collection. Remembering the way we named and described the African sculpture in our first session, there is something familiar about the task.

Towards the end of the sessions they are asked to write about what stood out for them in the course as key learning and why. These make compelling reading, and at last I feel like we are making sense to each other. More than one student remarks that in responding to questions, the facilitator re-asks the questions to the whole group and answers with another question. They notice the different seating patterns in two rooms that we use: the semi-circle of chairs and tables where we view the slides and give presentations versus the studio with large tables around which groups of five or six can comfortably sit. They take away from the course embodied learning about ways to conduct group processes in class, something their lecture-based courses in other disciplines do not.

The final artwork no longer makes up any significant part of the marks. The students are asked to photograph or draw their final group sculpture to add to their journal and then individually write a piece of creative writing in response to the artwork. This may take the form of a narrative, a poem, a critical reflection the process of creating the artwork as a group.

The examination equivalent for the visual art component now has two parts. The first part is a discussion of three reasons as to why art should be included in a senior primary curriculum (drawing from the reading and the group discussion) and the second is a lesson plan that integrates an art activity with content from another school subject (modelled in the treasure hunt/mapping activity). Table 15.2 itemises how the childhood pedagogies worked in the higher education classroom.

Table 15.2 Summary table of pedagogical elements and their workings

Pedagogical element from childhood pedagogies	How the element works in the higher education classroom
Documentation	Displaying of drawings and discussion points on walls Publishing group responses for whole class
Community of enquiry	Focusing on generating questions from reading Reading for themes Getting to know each other – introductions Listening to each other – 'rules' for group processes
Emergent curriculum (*progettazione*)	Planning for the unexpected – stories from objects Playing, drawing games, reading activities Planning in groups – decisions about what to collect, what to make, how to make Flexibility in curriculum enactment
Agency of material	Resisting pre-planning sculpture Responding to physical materials in storytelling and in construction Attention to lay out of learning space

Discussion and conclusion

Each of the attributes described in the editors' introduction relate in particular ways to how the pedagogy played out in the first-year art methodology course. In concluding, I will draw out the points touched on above in the description of the programme.

Creativity and innovation

The experience of co-constructing an artwork from collected found and waste materials gave students direct knowledge about their own capabilities and powers of innovation, particularly when they paid attention to working cooperatively with both the human and non-human elements in their environment. Sensitivity to what their objects brought to the group's generation of ideas was something that surprised a number of students. I have a sense that most of the students experienced the excitement of taking a playful and tentative approach to working with materials. This is one of the most important lessons to be learnt as an art educator: that an open-ended process is central to the creative process. This was effected through the designing of activities that depended

on students' engagement, on what they brought to the classroom and on what they made together. In the spirit of '*progettazione*', I would be open to the possibility of students deciding to make one large sculpture rather than working in groups for example, or in deciding on a particular writing activity in response to their work. As I learn to work in a more exploratory and playful way, so the students are more likely to take these steps and take more control of the classroom processes.

Resilience

To survive, adapt and thrive in a changing and unpredictable world is a mark of resilience. Resilience is the opposite of rigidity; it requires flexibility and fluidity and does not preclude the wise use of peer support, collaboration and trial and error. All of these practices were part of the playing out of the course. Students who expressed fear and nervousness with regard to any art making (particularly drawing) changed their ideas about this by the end of the course. This was because they had multiple opportunities to play and to fail if necessary (e.g., drawings were low-stake activities and were repeated with different media in the sketch book and not 'marked').

Working across teams and across experiences

Their working group was their 'home' for the course. They tackled readings together, shared ideas, formed WhatsApp groups, collected materials and co-constructed an artwork. The larger group also provided peer interaction, as documentation of processes were shared across groups in whole class discussion and displayed on classroom walls. Students were encouraged to walk around the room at intervals to see the drawings of their peers. Group inputs were typed up and printed for distribution to the whole class for inclusion in their own course notes. I am sure the practice of documentation has infinite potential in the tertiary classroom to make learning visible and shared as students have their own digital devices and share images and notes easily and willingly.

   Interdisciplinarity is an important aspect of this attribute of working across experiences, and a number of features of the course worked to connect ideas and open up questions that went far beyond the immediate field of art education. Contemporary art and the ideas the artists explore through their works, namely coloniality, transition from war to peace and development, supported this. Social and political ideas expressed through visual and material objects emerged through the stories that grew out of the random objects brought to class.

Mapping real artworks on campus using geographical tools made further interdisciplinary links.

Design thinking

Giving time to introductions so that we can get to know one another as a group represents a commitment to taking care and responsibility for our relationships. It is a rejection of indifference. It is our difference that makes us a dynamic community, but our learning networks are not only human. Our awareness of our environment, including the spaces, objects and intra-actions that make them up (the ecologies of learning), makes us more able to actively participate in the construction of better learning spaces and, by extension, if the learning has been effective, our students will too.

The pedagogies employed in this first-year arts methodology course have the potential to open up and refresh students' ways of working with knowledge, with materials, texts and with each other. The focus on mutual engagement and dialogue for the purpose of co-creating, flattens the relative hierarchies and diversities of language, culture, age and experience and introduces a playful and inclusive attitude that is likely to influence the way they engage with their studies going forward and hopefully also the way they become teachers: teachers equipped to develop a future generation of Citizen Scholars.

Notes

1. Lipman developed mini novels that would stimulate the learners' engagement with a range of core philosophical questions about the nature of reality, ideas about love and justice, life and death. These materials were part of structured curriculum for children from about age ten. Subsequently, practitioners working with both younger children and adults have developed alternative materials and more flexible approaches using newspaper articles and other more accessible starting points.
2. Sheridan (2009) gives a useful framework to describe the way a 'studio' approach works. The approach is characterised by three key structures: (1) students-at-work in which the students work independently on a project set by the teacher; the teachers observe and consult with individuals or small groups, and sometimes speak briefly to the whole class; (2) demonstration lectures in which the teacher presents information about processes and details of assignments, and shows visual examples; and (3) critiques in which centralised discussion and reflection take place around work completed or in progress.
3. To give some examples: El Anatsui constructs, with the help of large teams, enormous and luxurious 'textiles' made from the metal bottle top seals from whisky and wine bottles 'sewn' together with tiny pieces of wire; Romauld Hazoumé, makes assemblages of mask-like faces which are recycled

oil containers; Gonçalo Mabunda, reworks de-commissioned weapons from the Mozambiquan war into images of peace time and progress (a bench, a mini Eiffel tower).
4. Lind and her colleagues at Konstfack in Stockholm educate teachers for the Swedish education system. Lind has worked closely with the Reggio Institute at the University of Stockholm, and in her work she engages with new materialist and posthumanist theories and performative and visual methodologies of knowledge production and research. The story-telling activity in this account came from her.

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16

Critical Thinking Pedagogy and the Citizen Scholar in University-Based Initial Teacher Education: The Promise of Twin Educational Ideals

Mandivavarira Maodzwa-Taruvinga

Introduction

Over the centuries, the course of human development has become closely intertwined with the need for concomitant changes in education. International tracking of required changes has invariably focused on issues of access to, equity, equality, quality and relevance of education across the education system. Within the last two decades, significant frameworks that reiterate and reinforce each other have been adopted: Thailand's Jomtien Education For All (EFA) (1999), the Dakar Framework for Action EFA (2000) and the Millennium Development Goals (MDGs) (2000) and the subsequent Sustainable Development Goals (SDGs) of the post-2015 sustainable development agenda (UNDP, 2015). Within higher education, there have been regional and international agreements such as the Bologna process and Lisbon strategy in Europe, ENLACES in Latin America and harmonisation strategy within the African Union. In spite of these efforts, the narrative of a crisis of education has remained, not just in sub-Saharan Africa education, but globally. Key trends within higher education such as the effects of massification, diversity and its implication for inclusion and exclusion continue to challenge the adequacy and even relevance of teaching, learning and assessment discourse practices (Altbach et al., 2009).

The success of these initiatives is variable and will always be work in progress. While the relative expansion in primary and secondary enrolments has had knock on effects on the higher education sector,

the reality is that Africa still lags behind the rest of the world in the provision of tertiary education. Of the over 150.6 million tertiary students in the world, tertiary-level participation in Africa was 5% in sub-Saharan Africa compared to over 70% in the Western countries of post-secondary students (Altbach et al., 2009).

The education crisis in Sub- Saharan Africa has its roots in the well-documented legacy of colonial segregationist policies (Atkinson, 1972; Azevedo, 1980; Bolibaugh, 1972; Christie & Collins, 1984; Murphree, 1975; Zvobgo, 1994) which were inextricably tied to the centre–periphery imperial capitalist formation that continues to define socio-cultural, sociopolitical and socio-economic relations. The production and reproduction of inequalities within education and society is further defined along race, class, gender and ethnic differences. Yet, amidst the challenges of 'illiteracy, disease, unemployment, poverty and inequalities between classes and ethnic groups' (Hussein 2006: 363), a new narrative about sub-Saharan Africa is emerging, namely 'Africa rising' or 'Africa on the move'.

There is persistent lack of access to quality universal primary education and a relevant higher education responsive to the dynamic needs and realities of Africa. Re-imagining and creating 'academic support and innovative approaches to pedagogy' within universities for purposes of developing either academic specialists or professionals (Altbach et al., 2009) among diverse students is part of the task. There is a growing consensus of the need for particular graduate attributes and proficiencies within developing regions with emerging economies. These include 'strong leaders with generalist knowledge who are creative, adaptable, and able to give broad ethical consideration to social advances' (Altbach et al., 2009: 14).

Given that teaching and learning define the core business of education, this chapter reflects on how specific pedagogical approaches and experiences manifesting within university-based Initial Teacher Education (ITE) can be instructive for university education in ways that also cascade to the rest of the education system and society. In an era that places a high premium on knowledge and graduate outcomes, the clamour for higher education to develop human resources with particular attributes has never been louder and more urgent even in the face of the phenomenon of large classes and dwindling resources. In sub-Saharan Africa, the influx of students from marginalised socio-economic and cultural backgrounds into institutions characterised by certain hegemonic academic practices has often led to high student dropout and low completion rates (cf CHE, 2013; DHET, 2013).

Authentic learning by students from diverse backgrounds, most of whom are usually first-generation university entrants, requires deliberate and careful attention to approaches that facilitate not only a synthesis of knowledge and pedagogy to develop scholarship but also generative and transformative attributes within students. Given that the traditional university was never concerned with 'social purpose' as its *telos* but education of the mind for its sake, the demand for a new purpose is anachronistic to its identity. To add to its woes, knowledge production is no longer the preserve of the traditional university. The insidious spread of scholarship, innovation and entrepreneurship that links with social responsibility within a dynamic knowledge society of the twenty-first century demands that the university reinvents itself in order to remain relevant. The task involves the need to respond to the complexity of educating for both scholarship (made possible by sustained engagement with knowledge and learning) and active citizenship (manifested by individuals' engaged creativity, development of resilience, ability to work across teams and the development of ethical leadership and care for the common good). This, in short, is about the need to design a pedagogy which supports the development of a 'Citizen Scholar'.

The notion of the Citizen Scholar can be viewed as being partly derived from the mainstream normative conception of citizenship. Marshall defines citizenship as a 'status bestowed on those who are full members of a community. All who possess the status are equal with respect to the rights and duties with which the status is endowed' (1950: 28–29). The status of a 'citizen' therefore confers rights and responsibilities. Increasingly, however, the daily global reality is that citizenship, whether as membership to the nation state, communities of inquiry or professional communities, is characterised by inequality and exclusion depending on individuals' race, class, ethnic, national, religious or sexual identities. This diversity and difference and not homogeneity characterises citizens, and hence citizenship is a 'contested' and 'slippery' concept (Lister, 1997).

The ideal of a Citizen Scholar, when it carries the universal, homogenous and essentialist overtones of the notion of a citizen, assumes equality. Yet, evidence abounds of the minimisation of individuals' rights to act or enunciate due to the markers of differences that define their identities. The Citizen Scholar is therefore likely to be burdened in due to a multilayered identity categories especially as it looks to both the nation state and the community of scholars for membership.

A detailed discussion of the politics of citizenship is not intended here, but the implications of its complexity for imagining the Citizen Scholar is likely to be instructive. Citizen Scholars who interrogate the taken-for-granted will be predicated on the development of reflexive and wide-awake thinkers who engage in critical and reflective practices. While the emancipatory potential of the Citizen Scholar is likely to hold traction with many educators (after Lister, 1997), the realities of the existence of inclusion and exclusion based on students' identities imply that the vision ought to be approached with a wide awakedness. A critical part of the agenda of university education should be rethinking and developing a pedagogy for the development of knowledge, skills and attitude to enable diverse students 'to operate effectively in more complex, fluid and ambiguous environments' (Altbach et al., 2009: 111).

Given the centrality of pedagogy within ITE, university-based ITE is well placed to propose and articulate pedagogic discourse practices that nurture attributes and dispositions germane to the ideal of a Citizen Scholar. In addition, teacher education speaks to an entire education system, facing both schools (from early childhood to high school) and tertiary education (including colleges and universities). It is, therefore, strategically positioned to influence the development of Citizen Scholar attributes necessary for an effective response to development needs. While there is a 'real (and very complex) "identity problem" around teaching and research' within universities (Altbach et al., 2009: 120), a strong teaching identity is what distinguishes university-based teacher education programmes from other university programmes. The well-recognised problems of massification – large classes, diverse students and the need for different student outcomes – makes the search for an appropriate pedagogy an imperative.

The selection of what is considered appropriate pedagogy is often a pendulum shift between the didactic teaching associated with the traditional university and student-centred approaches that focus on constructivist learning. The challenge is how to conceive an approach to pedagogy that transcends binaries. In this chapter, *critical thinking* is conceptualised as having the potential to unleash a re-imagination of pedagogy within university-based ITE in ways that cohere with the development of a Citizen Scholar. ITE programmes require educators to creatively do the following:

1. Respond to the ever-changing and expanding demands that charac-terise the 'knowledge society'

2. Provide a quality education through pedagogies that facilitate the development of critical, creative and caring thinkers
3. Develop a consciousness that interrogates the 'taken-for-granted' within both local and global realities

In South Africa, there is recognition of the 'pressing need for more graduates of good quality, to take forward all forms of social and economic development. It (South Africa) also needs more graduates to build up the education system itself by providing a strong new generation of teachers, college lecturers, academics and education leaders' (CHE, 2013: 15), who will inevitably face varied and diverse school conditions due to unequal socio-economic development across urban and rural areas (cf. Vavrus, 2009). Higher education is therefore expected to 'bring about systemic reforms within its teaching and learning system', as failure to do this will be 'to the detriment of development, equity and individual advancement' (CHE, 2013: 68). Within university-based ITE, the conceptualisation of pedagogy, as a resource that lays a strong foundation for quality teaching and learning in diverse educational institutions, is a moral imperative. When Africa's problems and challenges are juxtaposed with its potential for economic development, the need for an engaged, creative, resilient and adaptable citizenry necessitates re-looking and rethinking university pedagogy both in general and with a focus on university-based ITE.

The call for a pedagogy that mediates successful learning while developing relevant graduate attributes and proficiencies, as outlined in the introduction of this text by Arvanitakis and Hornsby, is a timely clarion call for teacher educators. While a number of factors constellate to influence learning achievement within the university, pedagogy offers the space and latitude not just to enable access to knowledge but also to develop proficiencies required of a Citizen Scholar. In this context, it is proposed that critical thinking conceptualised as pedagogy offers possibilities for the development of the necessary attributes argued for throughout this collection.

As a form of pedagogy, it is suggested that critical thinking would, with the same brush stroke, address issues of knowledge, process and values. If availing 'powerful disciplinary knowledge' is a social justice issue, then it is a necessary but not sufficient step in defining academic identity. However, the state of the African continent or the world is clearly in need of citizens who are more than discipline specialists or academics. This should jolt all educators into reflecting on whether prospective teachers are 'leaving college clothed with literacy,

intellectual understanding and depth of insight supposedly symbolised by the degrees they have earned' (Chafee, 1991: 121) or there is more that could be developed? If learning is the cornerstone of individual development and a sustainable quality education system, then a focus on content coverage and its mastery is not sufficient. Teaching and learning should foster *critical thinking* across the curriculum.

Given the unknown challenges of decades ahead, *critical thinking* when combined with the ethical imperative of social justice is likely to future proof higher education. It is here we find the very core of what we have termed here, the 'Citizen Scholar'.

University-based ITE as a fulcrum of innovative pedagogy and the Citizen Scholar

Teacher education is both academically and professionally positioned to meet the obligations of a scholarly and social project. In spite of its poor second-cousin status within academia, teacher education is the embryo from which a nation's human resources across all sectors can develop. Rethinking university pedagogy with ITE as the fulcrum is therefore poignantly significant. Apart from being pivotal, it can be viewed as an oasis from which education at different levels continuously draws from.

Pedagogy is with the interaction of teaching and learning in order to mediate knowledge, skills and values. Indeed, Alexander argues that '*teaching, learning, curriculum and assessment* are important interrelated aspects of *pedagogy's substance and justification'* including 'the wider sphere of *morally purposeful activity'* (2001: My emphasis). The embodied, institutional and discursive nature of pedagogy is operationalisable within culturally diverse policy contexts. Within these diverse locations, an innovative pedagogy ought to addresses the wider concerns of teaching, learning, curriculum and assessment with the unifying aim of developing the Citizen Scholar. The nexus of teacher education, schooling and higher education, is critical for imagining the maximum impact of the Citizen Scholar.

At both international and national levels, the connection between schooling and teacher education is already recognised (cf. Goodlad, 1990; MRTEQ – Government Gazette, 2011). The schooling–higher education connection is usually in terms of viewing the former as laying the foundation for successful performance in the later. That the nexus among the three sectors is facilitated by ITE is usually a mute point. Of relevance here is that ITE can spearhead a pedagogy that

develops attributes relevant for graduate teachers and university academics, where the development of such attributes and proficiencies is realised in a trajectory from schools to higher education institutions.

Arvanitakis and Hornsby, in introducing this text, identify attributes critical for the Citizen Scholar in detail. They include the ability to be creative, develop resilience, reflect design thinking and work in teams. These require the following qualities:

- *Adaptability* to an ever-changing environment
- *Mistakability* (learning from mistakes and in the process building emotional intelligences and resilience to accept feedback and guidance)
- *Critical thinking* (including the ability to see the invisible)
- *Reflective* skills
- *Processing* skills
- *Aesthetic design* or appreciation
- Caring about people with an *ethical leadership*
- Being part of an international body and therefore being inclusionary, appreciating diversity and developing new literacies

It is generally expected that ITE ought to develop teachers who are *critical* and *reflective* thinkers, *imagine alternatives*, are *adaptable* members of a *community of professionals* who are also responsible towards community's goals and appreciate that the context of operation is always dynamic.

To this end, *critical thinking* is not just an attribute to be developed but has dimensions of process and substance that can develop other attributes as listed above. It is therefore important to define *critical thinking* and how when as applied to pedagogy it has the generative capacity to develop attributes that conflates with that of a Citizen Scholar.

Critical thinking defined

There is no clear definition of *critical thinking* as different theorists place emphasis on different aspects. Robert Ennis (1985), for example, views it as a reflective and reasonable process that focuses on deciding what to do or believe. Matthew Lipman describes it as skilful and responsible thinking that facilitates good judgement because it 'relies on criteria, is self correcting, and is sensitive to context' (1988: 39). Richard Paul (1990: 33) says that 'critical thinking is disciplined, self directed thinking which exemplifies the perfection of thinking appropriate to a

particular mode or domain of thinking.' Chaffee (1991: 121) suggests, critical thinking 'refers to a variety of complex, cognitive activities'.

A synthesis of these views shows that in addition to addressing *cognitive dimensions critical thinking* is also constituted by *substantive* and *procedural* aspects. Weinstein (1995) argues that *critical thinking* might be understood to pull towards two different foci that are nevertheless intertwined and necessary for a comprehensive understanding and use: one derives from both the formal and informal pedagogical strategies that aim at developing thoughtfulness through cognitive development and facilitation of intellectual readiness; and the other is a philosophical ideal, 'deeply rooted in the social and moral requirements of thinking' (Weinstein, 1995: 118).

The emphasis in these definitions point to the cultivation of abilities or skills and dispositions of discipline, independent thinking, reflection and making sound judgements based on evidence, reasoning and sensitivity to context. The arenas of *critical thinking* operation enable a rededication to both liberal and specialised university education, as well as different forms of professional education. Within and across disciplines, critical thinking appeals to

> a tradition of successful practice (skilfulness), must address the community of competent inquirers (responsibility), must be based on acceptable principles (criteria) in a fashion that takes into account the details that the particular issues involve (sensitivity to context), and must be reflexive in a fashion that supports progressive change (self correction).
>
> (Weinstein, 1995: 122, elaborating Lipman, 1988)

Critical thinking as an educational ideal appears to enable a multi-faceted gaze necessary for learning to teach (Lipman, 1988; Weinstein, 1995). It requires the development of 'competency in accessing information of all sorts, and assessing the strengths and limitations of particular disciplinary theory and practice within the context of a concern' (Weinstein, 1995: 121). Even in the face of dwindling resources, expanding classes, diverse students and the unprecedented local, regional and global state of politico-economic and socio-cultural flux, the nature of pedagogy selected should be sufficiently robust to address emergent academic, professional and societal responsibilities.

If, as Bailin et al. reiterate, 'an adequate conception of critical thinking must construe it as involving both responsible assessment of reasons and arguments, and responsible deliberation' that 'takes place in the context

of persons thinking through together by means of discussion and dialogue' (1999: 315–316), then the adoption of a student-centred constructivist pedagogy in ITE can be seen as casting prospective teachers as collaborative learners engaging in dialogic deliberation and reflection. Through collaborative and dialogic deliberation, the hallmarks of critical thinking, pedagogy becomes quintessentially critical thinking pedagogy.

A comparative analysis of how proto-pedagogies are mutually exclusive or inclusive can be determined by reference to personal experiences within university-based ITE courses of institutions in two African countries. The focus is on approaches to the teaching of compulsory courses such as curriculum, philosophy, sociology, psychology and history of education within a large class format of more than 400 students.

The dominant authoritarian lecture pedagogy

The dominant didactic pedagogy is characterised by content exposition through teacher-dominated lectures, use of power point or lecture notes and question and answer interaction with students expected to take copious notes. It is an approach which casts the lecturer as *the* authority of the discipline or field. The extent to which the lecture/lecturer-dominated approach can be argued as promoting or impeding learning is not straightforward. It is tied to context, for example a country's educational history and the educational backgrounds of both lecturers and students. A schooling background that privileged content knowledge or subject specialisation readily meets with the traditional emphasis on disciplinary specialisation associated with academic rigour within the university. This orientation tends to promote individualistic and competitive learning styles. This approach is not friendly to student diversity since students who lack the necessary cultural capital are likely to drop out or fail never to become Citizen Scholars. The danger is that Citizen Scholarship becomes an elite status for the few.

It is possible that large class or mass lectures and lecturer feedback on individual student writing can still enable independent learning and critical thinking of a particular type. However, the possibility that some students might lack an adequate grounding in disciplinary knowledge will inevitably lead to their being left behind. Africa's diverse historical and educational legacies and the dynamics of race, culture, ethnicity, language and class lead to complexes, silences and complexities. The lecture-dominated pedagogy is obviously convenient for mass production of graduates, but its impact can be varied. Such pedagogy is often viewed as privileging the authority and discipline that specialised

knowledge proffers, laying a foundation for cognitive growth and academic rigour. However, the social and moral questions which place people or humanity at the centre and would therefore require ethical or aesthetic commitments can be silenced due to emphasis on regurgitation or mimicry of facts.

The emphasis on content or conceptual mastery and summative assessment limits opportunities for self-correction. This is because the conditions under which feedback is provided are individualistic and at times detached. The extent to which knowledge claims can be judged as adequate and relevant has to be anchored in dialogue, collaboration and communication. A pedagogy dominated by didactic narration undermines these attributes and might in the process desensitise prospective teachers from appreciating the creativity and resilience that arise from embracing mistakability, flexibility, critical thinking and reflective processes.

Given the need for graduates to adapt to local, regional and global dynamics as they work with learners and curricula of different education systems, an authoritarian pedagogy is bound to compromise the potential development of the attributes of the Citizen Scholar. In fact there is a real danger that those who graduate will be 'Alien Scholars', alienated from the realities that confront them and which they are supposed to take responsibility of. There is no doubt that under conditions of knowledge eclosion, social chaos and instability, a pedagogy that presents knowledge as infinite, stable and a given might stifle and paralyse active citizenship.

The tragedy is that it is in societies that lag behind, technologically and developmentally, and are susceptible to poverty, oppression and violence, that the authoritarian lecture dominated pedagogy is likely to take root. The absence of tenets of a critical thinking pedagogy that temper an emphasis on content mastery with reflective, ethical and aesthetic inquiry will literally and metaphorically lead to a pedagogy of domination that in turn moulds passive and subservient graduates who might turn out to be pedantic scholars but lacking the responsibilities of citizenship. The attributes of a Citizen Scholar are relevant in all contexts but are absolutely essential for the development of a democratic and socially just sub-Saharan Africa.

Alternative insights from an introductory methodology course

A departure from the dominance of the traditional lecture approach is found in experiences of one course which offers an alternative

pedagogic approach. An introductory ITE teaching methodology course in one institution seeks to provide prospective teachers with conceptions, principles and theories of teaching and learning and their attendant practices. The course integrates with multiple subject disciplines, subject-specific methodologies and teaching experiences/practices as an introduction to the development of professional identity.

Since the course is compulsory, it is typically offered to between 400 and 650 students in any given year. Both the students and tutors (or assistant teachers) will inevitably have varied socio-economic and cultural backgrounds. A pedagogic strategy that combines the delivery of lectures and provision of tutorials is used on this course.

It is important to note that lectures can be engaging and meet a variety of complex pedagogical needs (see Hornsby et al., 2013). Combined with engaging tutorials and an assessment structure – both of which I discuss below – ITE can be a powerful experience that meets the needs for a developing Africa.

Tutorials

Tutorials are structured around oral and written activities based on student teachers' previous learning experiences, prior learning and reading preparation. Student teachers individually write down responses to specific questions and activities during tutorial preparations. The writing of tutorial tasks as part of tutorial preparation is a necessary and engaging first step in which students can think and reflect in a non-threatening way before they enter the public space of open discussions. Follow-up discussions during tutorials require that students' answers show a level of engagement with readings, as well as lecture expositions.

Unlike the lecture-dominated approach, tutorials offer a space for students to develop their voices. This approach immerses students familiar situations so that it becomes the basis for drawing out their voices and making them part of general and specialised conversations. Finding a voice is an important step in breaking the mould of the new and unfamiliar physical and cultural environment in which most students find themselves. During tutorial discussions, students gradually discover unity of purpose and the richness of their diverse and unique experiences. This sets the stage for *team thinking and action*. The development of an emerging community of students is very powerful in facilitating learning in ways which model pedagogy for future classroom teaching.

Nature of assignments

Assignments draw on students' experiences, as well as give room for personal stories or narratives. As part of tutorial tasks or formative assignments, students write short reflective paragraphs and essays based on observations in schools and classrooms. These observations are then analysed by them using course concepts or theories.

As such, theory and practice unite as the basis of critical thinking and reflection. Some of the questions or tasks offer opportunities for students to draft, redraft and edit with the collaboration of their peers, tutors and the Wits Writing Centre – an academic support unit that assists students and staff who need to develop writing skills. Through written drafts, students have opportunities to organise ideas logically.

Class discussions and individual writing play are central to critical thinking pedagogy. When personal narratives, reading, writing and rewriting are weaved together, they offer an opportunity to 'rehearse and clarify thought...', a key principle of Critical Engagement through Writing (CEW). CEW offers 'the opportunity for students to think, try, make mistakes, write multiple drafts, and think again – in other words to learn how to learn in the discipline' (Brenner and Nichols, 2013: 98) while developing a teacher identity. Such pedagogy makes teaching and learning processes authentic. Brenner and Nichols (2013) describe CEW as an approach that promotes *critical thinking*.

Students learn from mistakes and self-correct, and as they deal with and receive feedback and guidance in a supportive manner, emotional resilience is developed. Those who provide feedback must also be sensitive that the feedback provided is constructive and guided by criteria. This makes it obvious that learning is a reiterative and iterative process that the students can control and drive rather than all power resting in the hands of the lecturer and tutor. While the quality of written work might invariably display surface conceptual generalisations or mimicking of theories, this does not always mean inactive learning as students might be in a phase of developing a vocabulary or language to take part in enunciation or disciplinary conversations. In such situations, such work lays a foundation and it is what happens next that matters.

Critical thinking addresses both substantive concepts and theories that provide criteria for good judgements and sound reasons and procedures (such as collaborative working in teams in a safe space that allows mistakability, self-correction, adaptability, reflection and, therefore, resilience). Its manifestation through a combination of lectures and tutorials offers generative possibilities for the development of the

Citizen Scholar. A discussion of the merits and limitations of critical thinking pedagogy as exemplified within the introductory course is necessary.

The generative potential of a critical thinking pedagogy

A course characterised by personal narratives, reading, writing and rewriting allows students to develop or retrieve personal voices. Such an approach, argues Lipman (1988), creates safe spaces for students to make and learn from mistakes and self-correct in a community of collaborative learning.

The concepts and theories that appeal to the knowledge-constitutive interests provide a lens for the reflecting on past and current school and classroom experiences. This theory/practice interaction makes it possible to appreciate how changing circumstances can be analysed and understood. In the process, students see how it is possible to adapt to the current 'unfamiliar' university culture and, in future, as qualified graduate teachers to differently resourced schools in rural and urban areas.

Learning that starts from personal experiences stimulates and supports thinking and touches on multiple and interdisciplinary concepts. This is because such experiences are anchored in diverse geographical, historical, socio-cultural and linguistic backgrounds. In the process, when standards of deliberation, argumentation, developing plans of action and judgement are made clear as part of academic practice, we see cognitive, procedural and attitudinal dimensions of learning developed (Bailin et al., 1999). In the final analysis, the *critical* (true course concepts and theories), *creative* (the beautiful/aesthetic design thinking) and caring (*ethical*) aspects of thinking combine with personal experiences to reflect these standards in a robust form – and this is the core of *critical thinking* pedagogy. The reflective interaction of theory and personal experiences/practices in teaching and learning processes become the basis of the development of a teacher's identity and consciousness as a Citizen Scholar.

The nature of teacher professional knowledge is such that students in their oral or written discussions or assignments might lean towards practice or theory. However, the degree to which students are encouraged and required to reflect specialised conversations in oral and written discussion will determine the extent to which they are initiated into communities of scholarship. In a continent where knowledge production by African scholars is comparatively scant, a critical thinking pedagogy

appears to offer hope for the development of graduate teachers who have the confidence and conviction to become part of an inclusionary, diverse and interdisciplinary local and international education teams. As Maxine Greene reminded us:

> the activities that compose learning not only engage us in our own quest for answers and for meanings; they also serve to initiate us into communities of scholarship and (if our perspectives widen sufficiently) into the human community, in its largest and richest sense.

(1978: 3)

The traditional and dominant lecture-dominated pedagogy characterised by knowledge transmission or the alternative lecture/tutorial combination of critical thinking pedagogy have their strengths and limitations. The integration of student experiences and identities within the later approach is a marked departure from the narration of the lecture-dominated approach.

The educational histories and economic circumstances of countries in Africa do not allow an easy and outright dismissal of one type of pedagogy in preference of another. However, an analysis of what is enabled or constrained by each is possible. Africa is a continent whose trajectory is characterised by the paradox of increased poverty, inequalities and an uncertain future with a potential for prosperity. As has been highlighted by Hornsby et al. (2013), large classes should not necessarily imply inadequate knowledge transmission. In fact, it could be argued that contrary to the popular discourses of constructive pedagogies of small class/tutorial approaches, in Africa, the traditional and dominant lecture approach appears to provide affordable space and time for a rigorous conceptual expose while modelling academic practices that cultivate scholarship. In other words, it is not the nature of the medium of delivery, but the way we use the available medium to reach our goal-developing attributes of the Citizen Scholar.

The lecture/tutorial combination as an approach that appears to readily facilitate a *critical thinking* pedagogy is, nevertheless, resource-intensive – requiring more time allocation, an increase in teaching staff, material resources and physical infrastructure compared to the large class lecture-dominated approach. This is a huge challenge, given the limited or dwindling financial resources allocated to higher education in Africa. Yet, it cannot be disputed that a critical thinking pedagogy that promotes access to concepts and raises awareness of knowledge

contestation is necessary for university learning. It provides grounds for cognitive and intellectual development. The dominant lecture pedagogy might also be able to achieve this to some extent. However, conceptual or theoretical mastery does not go far enough for the tendency to mimic or reproduce the ideas (at times even plagiarise) without problematising or interrogating them militates against the development of attributes of an engaged, responsive and reflective Citizen Scholar.

Selection of a pedagogical approach, then, is a matter of responding to the complexities of integrating knowledge, being sensitive to diverse identities and the 'cultural, political and economic' realities where teaching and learning is about mediating these complexities (Vavrus 2009: 304). The class, cultural and educational backgrounds of teacher educators and students, the existing material conditions of institutions and increased numbers of students all have implications on what pedagogy is privileged. While there is a tendency for the pedagogical pendulum to follow the discourse that holds sway in a particular epoch, at least at the level of rhetoric, what actually is manifested in practice is what is deemed possible in particular contexts. Hence, it could be argued, after Vavrus, that in Africa, as indeed in other parts of the world, 'cultural, economic and political forces . . . privilege certain approaches to pedagogy . . . ' (2009: 309).

Regardless of how pedagogy is conceptualised or what pedagogy is privileged, there is an argument to be made for a transcendental *critical thinking* pedagogy necessary for the development of the Citizen Scholar. *Critical thinking* pedagogy becomes the premise for the development of appropriate graduate attributes and proficiencies within university-based ITE and schooling. The integration of knowledge, processes and values in ways that stimulate *creative*, *resilient*, *collaborative* and *ethical engagement* within courses, programmes across the curriculum and education system provides criteria for citizenship into a community of scholars. The capacity and potential embedded in such attributes and proficiencies make the ideal of a Citizen Scholar amenable to embracing and working with difference and diversity.

Critical thinking offers the promise of a transcendental and integrative thread not only across different cultural, economic and political contexts, epochs and disciplines but, more importantly, even across different pedagogical approaches. As a 'hermeneutic paradigm' (Elliott, 1993), it calls for situational interpretation and understanding of the unique, the complex and the unpredictable. *Critical thinking* as pedagogy manifests critical thinking ideals of truth (epistemology), the beautiful (aesthetics) and caring and ethics (Lipman, 1995). It is not only

contingent to prevailing material circumstances and cultural politics (Vavrus, 2009: 309), but is amenable to pedagogical alternatives. This resonates with Weinstein's (1995: 121) argument that *critical think-ing* is an educational ideal which potentially moves past gatekeeping 'towards the identification of methods and attitudes that help all students to achieve the standards of intellectual excellence and practical wisdom for full participation' in a rapidly changing continent and world.

Conclusion

Given that teaching should be *framed conceptually and ethically, as well as temporally and spatially* (Alexander 2001: 514), *critical thinking* as pedagogy clearly goes beyond the cognitive and logical dimensions to respond to the contingency of the spatio-temporal considerations. In the process, *critical thinking* 'draws upon the best in disciplinary practice in order to warrant the epistemological and other normative claims that are implicit in a discipline's claim to adequacy', as Weinstein cogently puts it (1995: 121).

The paradox of rapidly changing local and global realities, discourses of stagnant development and narratives of Africa rising, the so-called mass higher education and crisis of large classes makes urgent the need for a Citizen Scholar whose multiple identities are embraced as a source of what it means to be fully human. University-based ITE cannot just be about retention and throughput but equally important are the quality of attributes and proficiencies that prospective graduate teachers develop. Such attributes, when transferred or cascaded across a nation's education system, socio-cultural contexts and across sectors, become the bedrock of future proofing higher education.

A socially just *critical thinking* pedagogy has the generative potential to interrogate the realities and consequences of the legacies of inequity, inequality, silent exclusion as well as a narration sickness that tends to file away teachers and learners to become submissive, inactive citizens. Prospective teachers 'who are alienated, passive, and unquestioning...' and those who 'take the social reality surrounding them for granted and simply accede to them' (Greene, 1978: 4) cannot be transformative. There is an alternative. It is a pedagogy that enables learning as meaning making for an empowered and responsive Citizen Scholar whose commitment to communicative action instantiates entrepreneurship in diverse communities, contexts and circumstances across race, ethnicity, class, culture, sexuality, age and religion among other categories of difference.

This proposal for re-imagining a future proofed higher education from the vanguard position of a research-led university-based ITE is what will continually problematise and deconstruct the taken-for-granted of processes, substance and identities. This is what critical thinking pedagogy and the Citizen Scholar as twin ideal represent.

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