

Management for Professionals

Martha A. Gephart  
Victoria J. Marsick

# Strategic Organizational Learning

Using System Dynamics for  
Innovation and Sustained Performance

*Foreword by*  
Bill Pasmore

 Springer

---

# Management for Professionals

More information about this series at <http://www.springer.com/series/10101>

---

Martha A. Gephart • Victoria J. Marsick

# Strategic Organizational Learning

Using System Dynamics for Innovation and Sustained Performance

Foreword by Bill Pasmore

 Springer

Martha A. Gephart  
Teachers College  
Columbia University  
New York, USA

Victoria J. Marsick  
Teachers College  
Columbia University  
New York, USA

ISSN 2192-8096

Management for Professionals

ISBN 978-3-662-48641-2

DOI 10.1007/978-3-662-48642-9

ISSN 2192-810X (electronic)

ISBN 978-3-662-48642-9 (eBook)

Library of Congress Control Number: 2015957813

Springer Heidelberg New York Dordrecht London

© Springer-Verlag Berlin Heidelberg 2016

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Printed on acid-free paper

Springer-Verlag GmbH Berlin Heidelberg is part of Springer Science+Business Media  
(www.springer.com)

---

# Foreword

---

## Blueprint for Organizational Learning

One of the tasks of leadership is to improve things. Although it sounds simple, it is “anything but”—which is why the book you are about to read on strategic organizational learning is both remarkable and extremely useful.

Why is it hard for organizations to learn? Leaders are inclined to remain committed to their decisions even when there is evidence that those decisions are not working as planned (Staw 1976). Even when leaders pay attention to data indicating the need to change, they may find it difficult to recognize and modify deeply embedded beliefs about how things should be done—beliefs that are reinforced by the organization’s systems and processes (Tushman and O’Reilly 2002). Another possibility is that leaders don’t really know how to approach organizational learning and system change.

Often leaders have lacked a good blueprint to focus their learning and change efforts. The *Strategic Leverage Through Learning*® model—with its rigorous approach to diagnosis based on a tested model of organizational learning and performance, its collaborative approach to formulating testable solutions, its facilitative data-driven process, its emphasis on learning from action, and its insistence on using metrics to track progress and adjust action—is that blueprint.

A number of scholars have called attention to the turnover of companies in the Fortune 500 over the past 75 years (see the 2012 report by Stangler and Arbesman for an analysis of what causes the turnover to occur). There is evidence that the rate of turnover is increasing, through mergers and acquisitions to be certain, but also through outright failures of organizations to adapt to changes in their environment. One can only imagine how sudden and shocking the demise must have been for some of these companies. Leaders who felt they had nothing to fear were suddenly on the defensive with limited options to fight back. If only these organizations could have learned what was happening to them and figured out how to take action before

it was too late, their fate might have been different. Of course, even healthy organizations can benefit from learning and improvement. Yet many organizations struggle without an effective blueprint for learning and action.

### ***Strategic Leverage Through Learning***<sup>®</sup>

The model that Gephart and Marsick share here, *Strategic Leverage Through Learning*<sup>®</sup>, helps organizations catalyze innovation and sustain performance by understanding learning as an enabling strategic resource. Learning alone is not enough to drive innovation and sustain performance. Changes in the organization are also needed to leverage system dynamics. Organizational learning has become increasingly important to leverage performance to achieve strategic goals—as illustrated in the cases presented, whether it’s implementing a new strategy or business model, using executive education to support strategy implementation and strengthen networks, or generating ideas for increasing safety and saving lives. *Strategic Leverage Through Learning*<sup>®</sup> brings knowledge from the experience of those at the front lines to bear on both strategic and operational choices to improve performance.

The *Strategic Leverage Through Learning*<sup>®</sup> model provides a blueprint that guides organizations in using variations of a process that begins with systemic diagnosis as described above. A rigorous diagnosis, based on the model, enables stakeholders to understand system dynamics as they identify leverage points for change. It is in this way that *Strategic Leverage Through Learning*<sup>®</sup> works its magic.

The issue in most organizations is not a lack of interest in learning or change; it’s a lack of know-how, or a lack of agreement on where or how to begin. In organizations, there are many voices to be listened to, both internal and external, each driven by self-interests and motivations of various kinds. These voices may focus on some aspects of reality, but not others. Further, their urgings may be misguided or vitally important to the organization’s future, and there may be no good way in the moment to differentiate between the two. Never is the confusion we experience more pronounced than during change. Even though all of us would like things to be better, where things begin to break down is when we start talking about exactly who or what needs to change. While improvement is a shared goal, the objects of improvement and the best way to get from here to there are often fiercely contested. The inability to settle the arguments that arise during change may lead to an unproductive cacophony of voices that becomes louder and louder in direct proportion to the convictions of the speakers and their unwillingness to entertain others’ points of view. These dynamics are real and represent a powerful barrier to change. Unless they can be overcome, progress will be halted before it begins. The diagnostic phase of *Strategic Leverage Through Learning*<sup>®</sup> supports alignment, increases clarity, and signals a call to action that points at what must change and suggests where to begin.

Against this backdrop, *Strategic Leverage Through Learning*<sup>®</sup> provides a framework that guides learning and action. Data from multiple perspectives are gathered to prepare an overall picture of what is happening and of barriers to, and

supports for, what needs to happen. The voices of those closest to the action or “on the ground” are especially important to bring to the fore. Throughout the history of planned change in organizations, the tendency to plan things at the top and expect them to work without gathering actual data to check on what is really happening is a recurring theme. Some of the earliest studies in the field point to the importance of engaging front-line people in changes they are being asked to implement, like Coch and French (1948) and Trist et al. (1963).

When using *Strategic Leverage Through Learning*®, the development of strategies and actions is undertaken collaboratively, with the help of those who know how things really work and which levers will need to be pulled to make a difference at the end of the day. Of course, not all the things people think will work do work. That’s why the approach outlined here is characterized as *action-learning*; we try things out and then take a hard look at whether things really change as expected. If not, it’s back to the drawing board. We recognize that single changes may not have much impact in a complex, interdependent system. Multiple changes are required, and these changes must be used to increase alignment over time. Comparing progress to the metrics that were agreed upon at the beginning helps keep the process on track.

---

## No Magic Bullet

There is no magic bullet. If real progress is the goal, investing time, resources, and attention is often required for significant improvement, as documented in the cases presented here. The cases are remarkable stories of organizations or collaboratives that rose above their own histories or limitations and set examples from which others can learn. These amazing stories—and the analyses of them by Gephart and Marsick—will help you understand how effective change can be implemented, even if you have no clear sense of where you are headed or how you will get there when you begin.

The world won’t become less complex or less competitive, and change will not slow down or become less necessary. Wise leaders understand that undertaking change is something that is as important to success as strategizing, risk management, and fiscal responsibility. *Truly* wise leaders understand further that change is not episodic but rather continuous, and that *learning* to change and learning *during* and *from* change are as essential to success as satisfying customers or acquiring the best talent.

New York, NY  
July 2015

Bill Pasmore  
Teachers College, Columbia University, New York, NY, USA  
The Center for Creative Leadership, Greensboro, North Carolina, USA



## References

- Coch, L., & French, J. (1948). *Human Relations, 1*, 512–532.
- Stangler, D., & Arbesman, S. (2012). *What does fortune 500 turnover mean?* Kansas City: Ewing Marion Kauffman Foundation.
- Staw, B. (1976). Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Performance, 16*(1), 27–44.
- Trist, E., Higgin, G., Murray, H., & Pollock, A. (1963). *Organizational choice*. London: Routledge.
- Tushman, M. L., & O'Reilly, C. (2002). *Winning through innovations*. Cambridge, MA: Harvard Business School Publishing.

---

## Acknowledgments

Most books are not written by their authors alone, and this one is no exception. We would like to thank the many people who have helped make this book possible—especially family, friends, and colleagues.

Martha is grateful to her father, Landis Gephart, who helped her understand the importance of system dynamics at a young age.

Both Martha and Victoria thank Victoria's husband, Peter Neaman, for extremely valuable assistance with editing, formatting, and technology.

We thank our coauthors—Bill Goodspeed, Alexander Hoffman, Suzanne Kucharczyk, and Kathleen Wall—who have traveled this journey with us in classes and extended conversations about their work and research on organizational learning. We also thank Carol Burris—a former student of Gephart's, and an occasional guest presenter in Gephart's class—who shared her thinking about implementing *Leveling Up* as Principal of South Side High School.

Thanks also to the individuals and organizations that worked with us as we researched and developed *Strategic Leverage through Learning*®. An extended contract with the U.S. Army enabled us to gain insight into many of its pioneering knowledge networks and communities. Former student Diana Woolis, as Director of CASAWORKS for Families, invited us to assess organizational capacity and learning at the implementation sites. Thanks to Bill Klepper and Willie Pietersen at the Columbia Business School, Executive Education, and Par-Anders Pehrson and Stephen Newman (then at Ericsson) for allowing us to use the data we collected when we assessed their leadership development program's influence on strategy development and implementation. We appreciate the talent and contribution of students, analysts, and staff throughout the evolution of our model and instruments: Andrew Shiotani, Daniella Fuchs, Dave Cirillo, David Livert, Jessica Murphy, Mathis Schulte, and Veronica Denes who assisted us with our research; and Stacey Robbins who assisted with the book manuscript.

We codirect the J. M. Huber Institute for Learning in Organizations, Teachers College, Columbia University, through which we have conducted some of our research—an Institute that was made possible through a competitive grant from the J. M. Huber Corporation. We thank them and those at Teachers College who have helped us move forward with our work at the College. A special thanks to Warner Burke—who was the Chair, Department of Organization and Leadership,

at the time the Huber Institute was founded. He supported our early efforts and influenced some of the foundational thinking we did about our model and instruments.

Finally, we thank Bill Pasmore, for writing the Foreword to our book, and our editor Prashanth Mahagaonkar, whose patience and understanding of academic lives and schedules buoyed us on our writing journey!

---

# Contents

<b>1</b>	<b>Introduction</b> . . . . .	1
1.1	Overview . . . . .	1
1.2	Introducing Our Model . . . . .	2
1.3	In-Depth Cases of System Learning and Change . . . . .	2
1.3.1	Engineered Woods . . . . .	3
1.3.2	Happy Land Amusement Park . . . . .	3
1.3.3	South Side High School . . . . .	4
1.3.4	Ericsson . . . . .	4
1.3.5	Autism Model Program . . . . .	4
1.3.6	CASAWORKS for Families . . . . .	5
1.4	Implications for Strategic Organizational Learning . . . . .	6
<b>2</b>	<b>Strategic Leverage Through Learning<sup>©</sup></b> . . . . .	7
2.1	Overview . . . . .	7
2.1.1	Changes at the System Level . . . . .	7
2.2	Foundations of Our Model: Strategic Leverage Through Learning <sup>©</sup> . . . . .	7
2.3	Use of Our Model in a Federal Judicial Agency . . . . .	10
2.3.1	Challenges Following Innovation . . . . .	10
2.3.2	Assessment and Intervention . . . . .	12
2.3.3	Improved Results . . . . .	13
2.4	Our Model: A Learning Approach to Change . . . . .	13
2.4.1	A Learning Approach to Change . . . . .	13
2.4.2	This Book . . . . .	15
	References . . . . .	16
<b>3</b>	<b>Engineered Woods</b> . . . . .	19
3.1	Overview . . . . .	19
3.2	Act I: Committing to a Vision Focused on a Risky, Breakthrough Strategy . . . . .	20
3.2.1	A Bold Stretch Goal Amidst Much Skepticism . . . . .	21
3.2.2	The Challenge: Developing Organizational Capacity for Productization . . . . .	22

---

3.3	Act II: Learning to Develop Specialty Products . . . . .	22
3.3.1	New Structures and Mechanisms to Bring the Right People Together . . . . .	23
3.3.2	Learning to Use, and Modify, a Stage-Gate Product Development Process . . . . .	24
3.3.3	Training to Support Team Work . . . . .	25
3.3.4	Building on Lessons Learned . . . . .	26
3.4	Act III: Learning to Market and Sell Specialty Products . . . . .	27
3.4.1	Hiring and Learning from Consumer Marketing Talent . . . . .	28
3.4.2	Discovering Builders and How to Market to Them . . . . .	28
3.4.3	New Marketing Approaches Led to New Sales Approaches . . . . .	29
3.5	Act IV: Learning to Manufacture Specialty Products . . . . .	30
3.6	Act V: Developing a Culture and Systems that Support Innovation . . . . .	31
3.6.1	Changing Leadership at the Top . . . . .	31
3.6.2	A Culture of Innovation . . . . .	32
3.6.3	Systems and Processes . . . . .	33
3.7	Act VI: Sustaining the Revolution . . . . .	34
3.7.1	Company’s Strategy and Market Position . . . . .	34
3.7.2	Organizational Learning and Knowledge Sharing . . . . .	34
3.7.3	Supporting Systems, Staff, Structure, Culture . . . . .	35
3.8	System Dynamics: Our Model . . . . .	35
	References . . . . .	39
<b>4</b>	<b>Happy Land Amusement Park . . . . .</b>	<b>41</b>
4.1	Overview . . . . .	41
4.1.1	The Amusement Park . . . . .	42
4.1.2	Park Leadership . . . . .	42
4.2	Phase 1: Learning from a Fatality . . . . .	43
4.2.1	Framing or Blaming . . . . .	44
4.2.2	Building Alignment . . . . .	44
4.2.3	Framing New Policies . . . . .	44
4.2.4	Monitoring Performance . . . . .	45
4.2.5	Reframing . . . . .	45
4.3	Phase Two: A Deeper Dive . . . . .	46
4.3.1	Diagnosing the Larger Problem . . . . .	46
4.3.2	Building a Shared Vision . . . . .	47
4.3.3	Sharing the Vision . . . . .	48
4.3.4	Taking Time for Reflection . . . . .	49
4.4	Phase Three: Tragedy Strikes Again . . . . .	50
4.4.1	Framing and Reframing . . . . .	50
4.4.2	Putting New Safety Mechanisms in Place . . . . .	50
4.4.3	Modeling Safety Behaviors . . . . .	52

---

4.5	Phase Four: Safety Becomes Personal . . . . .	52
4.5.1	Reorganizing to Maintain Safety . . . . .	52
4.5.2	Detecting and Correcting Safety Errors . . . . .	53
4.6	Summing Up . . . . .	54
4.7	System Dynamics: Our Model . . . . .	55
	References . . . . .	57
<b>5</b>	<b>Leveling Up: How South Side High School Learned to Transform Itself . . . . .</b>	<b>59</b>
5.1	Overview . . . . .	59
5.1.1	A Visionary Impetus . . . . .	60
5.1.2	Need to Change . . . . .	60
5.2	The Context: Rockville Centre and Tracking . . . . .	61
5.3	Raising Expectations: Increasing the Regents Diploma Rate . . . . .	62
5.3.1	Getting Started . . . . .	62
5.3.2	Guidance Counselors Were Key . . . . .	62
5.3.3	Structural Changes . . . . .	63
5.3.4	Heterogeneous Classes . . . . .	64
5.3.5	Beating the Goal . . . . .	65
5.4	Greater Expectations: Expanding the IB Program . . . . .	65
5.4.1	Bringing Students on Board . . . . .	66
5.4.2	Changing How Teachers Teach . . . . .	66
5.4.3	Sharing Data Outside the School . . . . .	70
5.4.4	Attaining Even More Success . . . . .	70
5.5	Summing Up . . . . .	72
5.6	System Dynamics . . . . .	73
	References . . . . .	76
<b>6</b>	<b>Linking Leadership Development to Strategy at Ericsson . . . . .</b>	<b>77</b>
6.1	Overview . . . . .	77
6.2	Assessing Changes in Executive Education . . . . .	78
6.2.1	What the New Program Looked Like . . . . .	78
6.2.2	A Critical Convergence . . . . .	80
6.2.3	Huber Institute’s Assessment of Fifth Custom Program . . . . .	80
6.3	How the Program Made a Difference . . . . .	81
6.3.1	Strategy Development and Implementation . . . . .	81
6.3.2	Personal and Leadership Development . . . . .	82
6.4	How Participants Used What They Learned . . . . .	83
6.4.1	Adapting the Strategy Cycle to Business Unit Needs . . . . .	83
6.4.2	Developing Competence and Micro-Strategies for Operational Efficiencies . . . . .	83
6.4.3	Capitalizing on Outside-In Thinking . . . . .	84

---

6.5	How Leaders Engaged Organizational Learning . . . . .	86
6.5.1	Building a Critical Mass . . . . .	86
6.5.2	Changing the Way the Organization Works . . . . .	87
6.5.3	Sharing Knowledge Across Boundaries . . . . .	87
6.6	Catalyzing Effect of Networks . . . . .	88
6.7	Organizational Supports for and Barriers to Strategy Work . . .	88
6.8	Summing Up . . . . .	89
6.9	System Dynamics: Our Model . . . . .	90
	References . . . . .	93
<b>7</b>	<b>How Schools Learn to Collaborate and Change Their Cultures by Implementing an Autism Model Program in Inclusive Classrooms . . . . .</b>	<b>95</b>
7.1	Overview . . . . .	95
7.2	The AMP Model . . . . .	96
7.2.1	Team Teaching in the Classrooms . . . . .	96
7.2.2	Transdisciplinary Collaboration . . . . .	97
7.3	The Schools . . . . .	98
7.4	How Washington Elementary Learned to Implement AMP . . .	100
7.4.1	Leadership . . . . .	100
7.4.2	Team Meetings . . . . .	101
7.4.3	Collaborative Relationships . . . . .	101
7.4.4	Informal Support . . . . .	102
7.4.5	Outside Observations . . . . .	102
7.4.6	Knowledge Transfer Within and Across Schools . . . .	103
7.4.7	Parent-School Relationships . . . . .	103
7.5	How Lincoln Elementary Learned to Implement AMP . . . . .	104
7.5.1	Leadership . . . . .	104
7.5.2	Collaborative Team Teaching . . . . .	104
7.5.3	Informal Support . . . . .	104
7.5.4	Team Meetings . . . . .	105
7.5.5	Outside Observations . . . . .	105
7.5.6	Knowledge Transfer Within and Across Schools . . . .	105
7.5.7	Parent-School Relationships . . . . .	106
7.6	Common Principles: Tailored Practice . . . . .	106
7.6.1	Shared Leadership . . . . .	107
7.6.2	Collaborative Team Teaching . . . . .	107
7.6.3	Informal Support . . . . .	108
7.6.4	Team Meetings . . . . .	108
7.6.5	Knowledge Transfer Within Schools . . . . .	109
7.6.6	Knowledge Transfer Across Schools . . . . .	110
7.6.7	Parent-School Relationships . . . . .	110
7.6.8	Climate and Culture . . . . .	111
7.7	Summing Up . . . . .	111
7.8	System Dynamics: Our Model . . . . .	113
	References . . . . .	115

<b>8</b>	<b>CASAWORKS for Families</b> . . . . .	117
8.1	Overview . . . . .	117
8.1.1	Assessment of Organizational Capacity and Learning for Collaboration and Service Delivery . . . . .	118
8.2	Capacities that Sites Needed to Develop . . . . .	119
8.3	Successful Sites . . . . .	122
8.3.1	Site A . . . . .	122
8.3.2	Site B . . . . .	122
8.3.3	Site C . . . . .	122
8.4	Capacities of the Successful Sites . . . . .	125
8.4.1	Problems and Adequacy of Services in Place . . . . .	125
8.4.2	Integrated Service Delivery . . . . .	126
8.4.3	Effective Partner Collaboration . . . . .	126
8.4.4	The CASAWORKS Organization/Staff . . . . .	127
8.5	How Successful Sites Developed Needed Capacities . . . . .	127
8.5.1	Site A . . . . .	127
8.5.2	Site B . . . . .	128
8.5.3	Site C . . . . .	128
8.6	Unsuccessful Sites . . . . .	129
8.6.1	Site D . . . . .	129
8.6.2	Site E . . . . .	129
8.6.3	Site F . . . . .	130
8.6.4	Factors Contributing to Lack of Success in Sites . . . . .	130
8.7	How the Sites Did . . . . .	131
8.7.1	What Predicted Client Outcomes . . . . .	131
8.8	How Sites Achieved These Outcomes . . . . .	132
8.8.1	Effective Service Delivery . . . . .	132
8.8.2	Effective Collaboration Among Partners . . . . .	132
8.8.3	Organizational Learning . . . . .	133
8.8.4	Organizational Capacity . . . . .	133
8.9	System Dynamics: Our Model . . . . .	134
	References . . . . .	137
<b>9</b>	<b>Leveraging System Dynamics for Strategic Learning</b> . . . . .	139
9.1	Overview . . . . .	139
9.2	Spotlight on System Dynamics . . . . .	140
9.2.1	System Dynamics in the Engineered Woods Case . . . . .	140
9.2.2	System Dynamics in the Happy Land Amusement Park Case . . . . .	142
9.2.3	System Dynamics in the South Side High School Case . . . . .	143
9.2.4	System Dynamics in Ericsson . . . . .	144
9.2.5	System Dynamics in AMP . . . . .	144
9.2.6	System Dynamics in CASAWORKS . . . . .	145



9.3	System Dynamics Patterns . . . . .	146
9.3.1	Direction of Flow When Initiated at the Transformational System Level . . . . .	146
9.3.2	Direction of Flow When Initiated at the Transactional System Level . . . . .	146
9.4	Cross-Case Dynamics . . . . .	147
9.5	Insights from Research and Practice . . . . .	148
	References . . . . .	161
<b>10</b>	<b>Using <i>Strategic Leverage Through Learning</i><sup>©</sup> to Address <i>Organizational Challenges</i> . . . . .</b>	<b>163</b>
10.1	Overview . . . . .	163
10.2	Using Our Model to Get Better Results . . . . .	163
10.2.1	Customized Surveys to Design and Support Interventions . . . . .	163
10.2.2	Understanding What Works and How It Can Be Improved . . . . .	165
10.2.3	Lessons Learned from Successful Interventions . . . . .	168
10.3	Using <i>Strategic Leverage Through Learning</i> <sup>©</sup> . . . . .	169
10.4	Variations in Using Our Model . . . . .	170
10.4.1	Guiding New Interventions . . . . .	170
10.4.2	Assessing and Improving Existing Interventions . . . . .	171
10.4.3	Exploring New Opportunities . . . . .	171
10.4.4	Using Our Off-the-Shelf Assessment Tool . . . . .	172
10.5	Embarking on a Learning Approach to Change . . . . .	174
	References . . . . .	176

---

# List of Figures

Fig. 2.1	System-level factors (Burke and Litwin 1992) and newly defined learning and performance outcomes in <i>Strategic Leverage through Learning</i> ® .....	9
Fig. 2.2	Using <i>Strategic Leverage through Learning</i> ® to predict strategic drivers and long-term performance .....	10
Fig. 3.1	Key system dynamics in Engineered Woods case with schematic of our model (Fig. 2.1) included for comparison .....	38
Fig. 4.1	Key system dynamics in Happy Land Amusement Park case with schematic of our model (Fig. 2.1) included for comparison ...	56
Fig. 5.1	Graduation rates by entry year and ethnicity, south side high school and New York state average, 1995–2006 .....	71
Fig. 5.2	Key system dynamics in SSHS case with schematic of our model (Fig. 2.1) included for comparison .....	75
Fig. 6.1	Strategic learning cycle adapted from W.G. Pietersen (2004) .....	79
Fig. 6.2	Key system dynamics in Ericsson case with schematic of our model (Fig. 2.1) included for comparison .....	92
Fig. 7.1	Key elements of Autism Model Program (AMP) .....	97
Fig. 7.2	Profiles of four AMP elementary schools (using pseudonyms) in this chapter .....	100
Fig. 7.3	Key system dynamics in AMP case with schematic of our model (Fig. 2.1) included for comparison .....	114
Fig. 8.1	Key system dynamics in CASAWORKS case with schematic of our model (Fig. 2.1) included for comparison .....	136
Fig. 9.1	Flow initiated by transformational system dynamics .....	147
Fig. 9.2	Flow initiated by transactional system dynamics .....	148
Fig. 10.1	Using <i>Strategic Leverage through Learning</i> ® to guide change ...	164
Fig. 10.2	Steps in developing a metrics plan .....	168
Fig. 10.3	Action learning definition and characteristics .....	173



---

## List of Tables

Table 2.1	Definition of constructs— <i>Strategic Leverage through Learning</i> ® .....	14
Table 4.1	Description of leaders’ roles and responsibilities .....	43
Table 8.1	Adequacy of services in place needed to provide comprehensive, customized, integrated services .....	121
Table 8.2	Capacities for integrated service delivery, effective partner collaboration, and effective CASAWORKS staff .....	123
Table 8.3	Client characteristics at successful sites .....	125
Table 8.4	Client characteristics at unsuccessful sites .....	130
Table 9.1	Highlights of cross-case system dynamics in Engineered Woods, South Side High School, Happy Land and Ericsson .....	149
Table 9.2	Highlights of cross-case system dynamics in AMP and CASAWORKS for Families .....	155
Table 9.3	Selected definitions of organizational learning .....	160

---

## 1.1 Overview

Organizations can catalyze innovation and sustain performance by understanding learning as an enabling strategic resource and by taking action to institutionalize learning to leverage the opportunities it can provide. Even when it has been institutionalized, learning alone is not enough to drive innovation and sustain performance. Changes are also needed in the organization—its culture, structure, processes, and mechanisms—as well as in ways that leaders leverage and support learning to build and sustain innovation and performance.

Innovative organizations have increasingly reconfigured organizational units and workflow design to promote and sustain innovation and performance. Seeking to be nimble, organizations have moved away from rigid, hierarchical structures toward increasingly flexible arrangements. These changes have improved the capacity of organizations to respond to rapid shifts and challenges emerging from uncertain and ever-changing environments. Research has begun to shed light on critical success factors for leveraging learning as a strategic resource.

Strategic organizational learning has become increasingly important in organizations that seek to leverage performance in support of strategy development and execution. Organizations must develop core capabilities that enable them to seek and use knowledge about changing environments to become more competitive and effective, to shift direction rapidly, and to proactively shape future environments. Knowledge is often distributed across global and/or decentralized operations, and resides both within the organization and its customers, suppliers, and stakeholders. Internal alignment is needed to meet goals, but over-alignment can impede innovation and change.

Because strategic organizational learning often requires whole system learning and change, there is no one best or right way to leverage such learning. This leads to confusion about what strategic organizational learning means and how it can best be brought about. Different practices may lead to the same outcome and similar practices may lead to different outcomes. The underlying dynamics of such learning

are key to success—not the simple adoption of one or other practice. These dynamics are the focus of this book.

---

## 1.2 Introducing Our Model

In this book, we define and illustrate strategic organizational learning. We provide examples of how it has unfolded in different organizations. We also present *Strategic Leverage through Learning*®—a model of strategic organizational learning and performance that includes supports for, and barriers to, successfully leveraging learning and performance to meet strategic goals. We present examples of how this model, and assessment instruments based on it, have been used.

The book includes examples from different organizational and inter-organizational settings. The cases are presented in order of increasing organizational complexity. The first four cases focus on single organizations; however, the last of these four is a large, decentralized global company with more complex intra-organizational dynamics than the first three cases. The case of the Autism Model Program (AMP) focuses on intra-organizational dynamics within schools, and networking across schools, as well as between schools and a support network. The final case, CASAWORKS for Families, focuses on the dynamics of interaction within and across agencies in community-based collaboratives. All chapters showcase successes, problems and dilemmas as organizations, networks and collaboratives seek to leverage system-level learning to meet strategic challenges.

In this chapter we describe the organization of the book and introduce the reader to the in-depth cases of system learning and change that are included.

In Chap. 2 we introduce our model and demonstrate its use to diagnose and leverage change in a Federal Judicial Agency (a pseudonym).

---

## 1.3 In-Depth Cases of System Learning and Change

In the cases that follow, we tell the story of the challenges that the organization or collaborative was facing, the processes and mechanisms put in place that leveraged learning and performance to meet strategic goals, and the outcomes from actions taken. We highlight feedback loops between system dynamics and learning and performance outcomes in each case. We conclude each chapter by discussing how the case illustrates system dynamics in our model.

All chapters are authored by Gephart and Marsick. In several chapters, additional authors are listed because they played a key role in co-authoring the case. Pseudonyms are used for all cases except for those for which we have permission to use their name—Ericsson, the Columbia University Business School Executive Education, South Side High School, CASAWORKS for Families, and the U.S. Army.

### 1.3.1 Engineered Woods

Chapter 3 tells the story of Engineered Woods, a division of a family-owned corporation that transformed itself from a commodity business to one serving a specialty niche market, and how all aspects of the organization became aligned when the whole system learned to successfully pursue a new business strategy. (This division is hereafter referred to as a company.)

As it turned out, the company's real challenge was commercialization. Engineered Woods developed the organizational skill to innovate over time through "productization"—a mix of product development, marketing, sales, and commercialization capabilities unique to the Oriented Strand Board (OSB) industry. Over time, Engineered Woods became a different kind of organization.

The chapter shows how leaders in Engineered Woods recognized the need for a new strategy, and learned to develop, manufacture and market new specialty products. Key to success was the way they addressed the misalignments that occurred at each step in this process, and sustained success. To meet an ambitious new stretch goal, the company had to discover what new types of products the market would buy, develop and manufacture them, and bring them to market. After bringing out a first innovative product, Engineered Woods learned, as an organization, how to sustain success by changing leadership, culture, systems, structures, measures, rewards, incentives, and practices for learning and knowledge sharing.

### 1.3.2 Happy Land Amusement Park

Chapter 4 highlights the ways in which Happy Land Amusement Park responded to two serious accidents—including hiring new managers and implementing new structures, systems, and practices—and, ultimately, created a culture of learning and of safety. The story of Happy Land Amusement Park revolves around the learning and changes it put in place over time in response to two fatalities, each of which made it clear that the park was not "safe," as presumed.

Over time, and in phases, leaders helped the park to build a vision of safety. Happy Land built and implemented a safety program, and captured and shared data of all kinds with its employees to prevent future accidents and incidents. Leaders put systems and practices in place that were based, in part, on learning they gained through outside networks, industry best practices, and experience in other organizations in which new talent had worked. The outcome was a changed climate, increased commitment, and an aligned organization with a strong pervasive safety culture modeled by leaders and supported by management practices, systems and knowledge sharing.

### 1.3.3 South Side High School

Chapter 5 tells the story of how leadership at South Side High School transformed the school by “leveling up”—eliminating tracking of students by high or low performance and instead grouping students heterogeneously and teaching them using a rigorous, honors curriculum—thus improving achievement for *all students* and closing an historic achievement gap between White and non-White students.

The chapter shows how using many sources of data helped leaders and teachers to diagnose and address problems, and to change both practices in the classroom and the culture of the broader school community. Analyzing, publishing, and sharing data allowed time for teachers, parents and the system to learn that the new model could be successful.

Leaders set a compelling vision and engaged commitment of all stakeholders to it. Through hands-on practices, leaders modeled, initiated, supported and rewarded behavior consistent with the new vision. A learning approach was used to implement the new strategy that was supported by changes in structures, systems and processes, and management/teaching practices.

### 1.3.4 Ericsson

Chapter 6 tells the story of how Ericsson—a high-technology, global telecommunications company—has used executive education to develop and execute a new strategy that involved both innovation and value-for-money while moving from a new products strategy to one that focused on integrated systems and services. The spotlight in this chapter is on how a common model, language, and set of tools for strategy development, embedded in a new executive education program, drove organizational learning and developed leaders who could better implement the company’s new strategy.

Implementing a new strategy always involves the identification and correction of misalignments. This was especially true in a company such as Ericsson, which had moved to a more centralized strategy but relied on informal networks and a consensus culture, rather than structure and hierarchy, for smooth implementation. Executive education was leveraged to build internal alignment among leaders, engage their commitment to the new strategy, and put structures, processes, and mechanisms in place to drive the new strategy throughout the company. Thus, the program built capabilities, and put in place a learning approach to strategy development and implementation.

### 1.3.5 Autism Model Program

Chapter 7 describes how four schools—that participated in an Autism Model Program (AMP)—learned how to implement an innovative research-based educational model for children who have Autism Spectrum Disorders, a growing



challenge for schools. The program's success depended on new teaching and learning practices in classrooms, yet coordinated action was also needed across classrooms and grade levels to reach school-level visions and goals.

How did schools develop the capacity to learn as systems—within schools, across schools involved in the program, and between the schools and the support network—in order to sustain innovation in the face of great complexity? Although the model was prescriptive in its principles, each school tailored the program to meet the needs of their teachers, students, and community.

The chapter sheds light on the critical role of leadership in these programs. Leadership was distributed and/or shared in the school. Collaboration was central success among a core of professionals who needed to work closely together to meet the needs of these children. They did so through team teaching, team meetings, and informal knowledge sharing and transfer within and across schools. Schools put in place: new processes for collaboration and knowledge sharing, new professional development for staff, redefined roles, new positions, and new ways to engage parents. They integrated the principles brought by the AMP into the everyday work of the school.

### 1.3.6 CASAWORKS for Families

Chapter 8 describes how inter-agency collaboratives designed and delivered comprehensive, integrated services for substance-abusing welfare mothers as part of a national welfare-to-work demonstration project (CASAWORKS for Families). A new approach to combining treatment and training and delivering comprehensive, integrated services in community-based settings required organizational learning and capacity building. Collaboration was needed at management levels, among field service delivery staff from many agencies, and in project staff groups within lead agencies.

The strategy was predicated on the integration of substance abuse, job training and other core services, the provision of simultaneous rather than sequential services, single point-of-service planning, and the use of an inter-agency collaborative for planning and service delivery. Each collaborative tailored the model to the needs of its clients and community.

We conducted a component of the research that assessed the extent to which, and the processes through which, sites developed the capacity to design and deliver integrated services for clients. Implementing the CASAWORKS model successfully was expected to require significant capacity-building and learning. To accomplish these objectives, we adapted the constructs and measures from *Strategic Leverage through Learning*<sup>®</sup>. We developed a new survey instrument to measure and assess site differences in organizational capacity and learning in ten inter-agency collaboratives that designed and delivered comprehensive integrated services. We also studied the processes and mechanisms of organizational learning in these sites over several years.

In the chapter we discuss factors that catalyzed or impeded success. The successful sites varied considerably. They developed diverse models and approaches to delivering integrated services and to developing collaboration among partner agencies. There was more commonalty in the unsuccessful sites and the reasons these sites did not develop this capacity—factors that are discussed in this chapter.

---

## **1.4 Implications for Strategic Organizational Learning**

In Chap. 9, we focus first on summarizing the system dynamics for each case, and use flow diagrams to contrast different patterns of interaction among transformational and transactional dynamics. We then highlight cross-case system dynamics and conclude with a discussion of insights from research and practice. We discuss ways in which system dynamics vary, depending on the meaning of “organization” in different cases.

In Chap. 10, we describe how organizations that used our model have improved organizational learning and performance in ways that led to substantial gains in achieving their strategic goals. We also describe different ways that the model and instruments can be used: to guide new interventions, to assess and improve existing interventions, and to explore new opportunities. We propose that organizations use a new diagnostic survey tool to assess their system learning and performance, and underlying system dynamics.

---

## 2.1 Overview

This chapter describes the research-based model that is the focus of this book—*Strategic Leverage Through Learning*<sup>©</sup>—a comprehensive model of organizational learning and performance developed by Gephart and Marsick (1999).

### 2.1.1 Changes at the System Level

*Strategic Leverage Through Learning*<sup>©</sup> emphasizes the importance of internal and external alignment when leveraging learning as a resource for progress toward successful strategic goal achievement.

For learning and performance gains to be institutionalized, organizational changes are often required. The organizational system is a critical determinant of whether and how individual and group learning enhance innovation and organizational performance. Learning at the system level, in turn, affects whether and how innovation and performance can be institutionalized and sustained.

---

## 2.2 Foundations of Our Model: Strategic Leverage Through Learning<sup>©</sup>

*Strategic Leverage Through Learning*<sup>©</sup> has been used to assess and build system-level capabilities needed for learning and performance in uncertain and rapidly changing environments. Diagnostic instruments based on the model have been used

---

*Strategic Leverage Through Learning*<sup>©</sup>—© 1999 M. A. Gephart and V. J. Marsick. All rights reserved.

to assess group and organizational learning that leverage innovation and strategic performance, and the organizational systems that support learning and performance. The model has also been used to assess and compare cases of system learning and performance, such as those included in this book.

Our model uses the system-level factors in the Burke-Litwin Model of Organizational Performance and Change (Burke and Litwin 1992) to define the key dimensions of an organizational system. Following Burke and Litwin, *Strategic Leverage Through Learning*<sup>©</sup> distinguishes between transformational and transactional dynamics. See Fig. 2.1 for a diagram of the model.

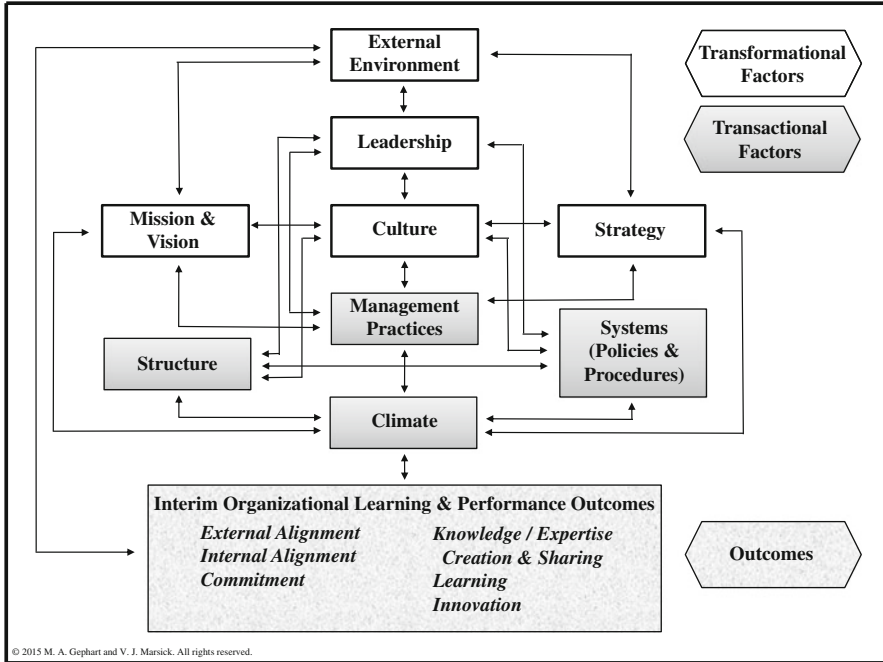
*Transformational* dynamics create enduring patterns of organizational behavior. External environment, mission/vision, strategy, leadership, and organizational culture are the transformational factors in the model. *Transactional* dynamics derive from the day-to-day interactions and behaviors of people in the setting. Changes in them are unlikely to persist unless the culture of the organization changes as well. The system-level transactional factors in the model are structure, management practices, systems (including policies and procedures), and climate.

Gephart and Marsick (1999) defined a set of learning and performance outcomes that represent critical capabilities needed for effective performance in a rapidly changing or uncertain environment: external alignment, internal alignment, commitment, innovation, group and organizational learning, and knowledge/expertise creation and sharing. They then redefined the constructs for each of the transformational and transactional factors to jointly optimize learning and performance.<sup>1</sup> Research that Gephart and Marsick have conducted shows that these learning and performance outcomes can predict the early indicators of the success of an organization's strategy—strategic drivers—that, in turn, affect its longer-term performance. These learning and performance outcomes are, in turn, influenced by the transformational and transactional dynamics through which learning leverages performance. See Fig. 2.2.

Once constructs were defined, measures were developed and validated to assess learning and performance outcomes, and the transformational and transactional dynamics in the model, for single organizations. This work was done in partnership

---

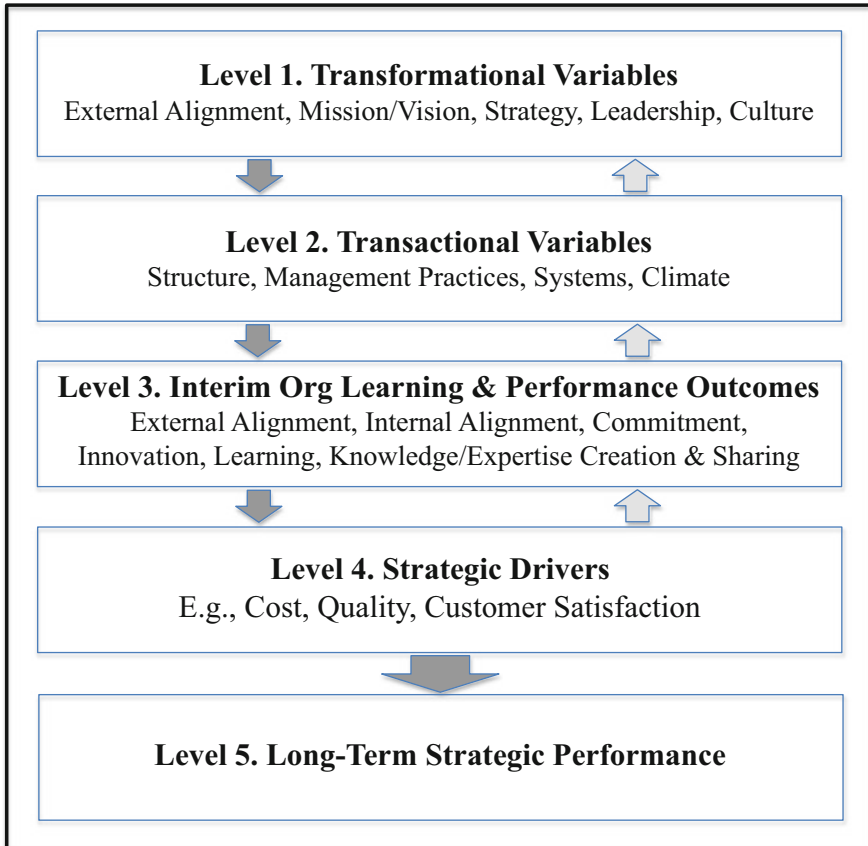
<sup>1</sup> We undertook several stages of work to identify and define these interim outcomes. First, we reviewed theory, research, and practice on models of organizations that are more successful in uncertain, rapidly changing, or highly competitive environments (Ashkenas et al. 1995; Daft and Weick 1984; Gephart 1995a, b; Gephart and Van Buren 1996; Lawler 1996). Because of the importance of organizational learning, knowledge creation and sharing, as well as innovation for our framework, we undertook more extensive reviews on those topics. Some of the most important influences on our thinking were Huber (1991), Leonard-Barton (1995), Nevis et al. (1995), Nonaka and Takeuchi (1995), Pedler et al. (1991), Redding and Catalanello (1994), Tushman and Nadler (1986), Watkins and Marsick (1993), and Wolfe (1994). We also conducted research on learning organization models and diagnostic instruments to identify the components and behavioral manifestations shared by different models (Gephart et al. 1997). A group of us (Gephart et al. 1995), working together, modified the assessment framework, developed earlier to conduct research on learning organization models and instruments, to integrate and synthesize new literature-based insights.



**Fig. 2.1** System-level factors (Burke and Litwin 1992) and newly defined learning and performance outcomes in *Strategic Leverage through Learning*<sup>©</sup>

with four diverse organizations, each of which was planning, or had begun to implement, interventions to address current or anticipated performance challenges created by rapid changes in their market or regulatory environments. Constructs for single organizations were subsequently adapted for use in assessing community-based collaboratives (CASAWORKS) in an evaluation of organizational capacity and learning in a national Welfare-to-Work demonstration project.

Customized versions of the survey-based instruments have been used in partnerships with businesses, schools, government, and not-for-profit agencies to track ways that organizations have used learning most effectively to achieve strategic goals and improve bottom-line results. By tracking pathways to performance that involve strategic learning, the partnership research has assisted organizations in assessing, building, and institutionalizing organizational capacity for performance-based learning. We have also used the model to analyze and compare cases, including some of those in this book.



**Fig. 2.2** Using *Strategic Leverage through Learning*<sup>©</sup> to predict strategic drivers and long-term performance

## 2.3 Use of Our Model in a Federal Judicial Agency

In this section, we demonstrate the use of our model to diagnose challenges and leverage change in a Federal Judicial Agency (a pseudonym). The Agency was experiencing challenges in using learning as a strategic resource.

### 2.3.1 Challenges Following Innovation

Performance declined following the implementation of electronic case filing. Subsequently, employee satisfaction also dropped, and interdepartmental conflict increased. A baseline assessment was conducted with *Strategic Leverage Through*

*Learning*® as part of a larger organizational intervention. With Gephart's help, the Judicial Agency used the baseline assessment to identify strengths and challenges in the Agency and to design interventions to improve results.

The Agency's greatest strength was its success in responding innovatively to changes in its external environment. This strength was supported by effective learning, innovation, and prioritizing goals on the part of work groups. Areas that needed improvement included the capacity of the organization to learn from its experience, the internal alignment of units and departments, and the motivation and commitment of employees in units and departments.

The Agency had successfully responded to customer demand for new services. It had improved the quality of its services by looking for new and better ways of doing things. These included seeking new ideas from within and outside the organization, developing new ways to improve work practices, and viewing new ideas as opportunities for learning. It had identified products and services to meet changing customer needs by listening to its customers, and had used knowledge about the changing environment to become more effective. Some work groups, but not all, were able to change focus and direction, and modify their processes and structures, when the organization changed its plans and goals. Work groups that were successful used diverse perspectives and unanticipated events to increase their learning.

However, learning from its experience remained a challenge for the Agency. The Agency was able to develop successful new services from things it had learned, but it could not respond quickly by changing its goals and practices when problems or crises indicated that the way things were being done no longer worked. When things went wrong, the Agency was able to solve problems, but not prevent them from recurring again.

### **2.3.1.1 Challenges in Outcomes**

A key challenge was poor alignment. Work processes were not integrated across groups and departments. Work group and departmental goals did not help people work together. Relationships were characterized by conflict and suspicion. Another key area for improvement was low employee commitment and motivation.

### **2.3.1.2 Transformational Barriers**

Leadership and culture were the most serious transformational barriers to innovation.

Senior managers did not model behavior that was required for learning and innovation. While senior managers actively championed new ideas in the organization, many employees reported they did not seek out input and opinions that were different from their own. Senior managers did not listen to employee input on organizational goals, and were not willing to be questioned about their decisions. Major decisions were often made final without the broad-based input that was needed.

Another key barrier to learning and performance was norms in the culture that did not support innovation, risk-taking or learning from experience. People did not

receive enough support for learning, nor did they get constructive feedback on their learning and work, or the help and advice they needed to work and learn together.

People were encouraged to try out new ways of doing their work but it was difficult to change practices and work routines. As a result, many employees believed that it was not good to be an independent thinker at the Agency. Most staff believed that it was important to talk about underlying values, but many staff did not trust each other enough to be honest about what they thought.

Data from the Agency's baseline assessment were consistent with the experience of many organizations—that the absence of trust and the tendency to blame when mistakes occur undermine staff's willingness to take risks, try new things, and openly discuss differences and mental models that are so critical for building the foundation for organizational learning.

### **2.3.1.3 Transactional Barriers**

There were problems with systems and structures. Communication and information systems were not effective. Many staff believed that the reward systems at the Agency tended to undermine trust and unity. Staff also believed that reporting relationships often got in the way of coordinating with the right people.

The day-to-day practices of managers, and the messages they conveyed, were barriers. Managers did not take responsibility for problem solving. They were often unwilling to be questioned, and were themselves often unable to work together productively.

There were big differences within and across departments in staff's assessments of their manager's or supervisor's practices. Staff reported that they did not have the resources they needed, either for performance or for learning. Managers were not perceived to be consistent in what they rewarded. A hierarchical orientation got in the way of getting things done.

## **2.3.2 Assessment and Intervention**

The baseline assessment was used to diagnose these outcomes, barriers, and supports. A key benefit of the diagnosis was the clarity it brought about intervention points and the way in which it catalyzed discussion and shared understanding of what needed to change.

Managers began to work together on projects they proposed, e.g., a new strategic planning process that benefited dialogue, coordination, and information flow. Managers created ways for staff, working with the Information Technology (IT) Department, to hold regular coordination meetings, analyze problems, and propose and implement solutions. Staff was helped to set, communicate, and work toward clear goals. The agency initiated practices to learn from experience such as After Action Reviews and the use of a suggestion box. The Agency introduced mentoring, coaching, and dialogue practices to improve commitment, motivation and trust.



### 2.3.3 Improved Results

A reassessment took place after 18 months using *Strategic Leverage Through Learning*<sup>©</sup>. The performance measure selected and tracked by managers—the rate of movement of cases through the court—stopped its decline and began to rise.

There were major improvements in interim outcomes. Work processes were better designed to integrate across departments. Goals helped units and departments work together more effectively. There were increases in opportunities for input, support for learning and performance, trust, and sharing of information.

---

## 2.4 Our Model: A Learning Approach to Change

Use of the *Strategic Leverage Through Learning*<sup>©</sup> model and instruments to diagnose gaps and guide change at the Federal Judicial Agency helped improve learning and performance that sustained innovation.

Over the years, Gephart and Marsick have used the model and instruments in many organizations, including: a global manufacturing and service company, a U.S. military organization, a health care organization, a Japanese subsidiary of a Dutch pharmaceutical firm, a nuclear power plant, the Federal Judicial Agency described in this chapter, and community-based collaboratives in a national welfare-to-work demonstration project (Chap. 8). Table 2.1 presents the definitions we use for the constructs in our model and instruments.

Change in organizations can be initiated at either the transformational or transactional level. If initiated at the transactional level, change is also needed at the transformational level to successfully transform an organization or system. If initiated at the transformational level, many changes are needed at the transactional level to get structure, management practices, and systems in place and aligned with the new vision and strategy.

### 2.4.1 A Learning Approach to Change

Approaches to implementing change fall along a continuum. On one end is the planned change model, starting with a clear vision of what the organization should look like at some future state or date. This view assumes that clear strategies have been identified, and hierarchies of goals can be derived from them. Gaps can then be identified between the present and future states of the organization, between current performance and future goals, and between current capabilities and those needed to reach future goals. Based on these gaps, an action plan can be used to build needed capabilities and a transition plan developed to move systematically toward the goals and the future state.

At the other end of the continuum is a learning model in which the process of implementing change involves trial and error, is often messy and lengthy, and depends on feedback and continual readjustment (Gephart 1998). According to

**Table 2.1** Definition of constructs—*Strategic Leverage through Learning*<sup>©</sup>

Construct	Construct definition
<i>Interim outcomes: learning and performance</i>	
External alignment	Capacity to use knowledge about, adapt to, and shape changes in relevant environments to enhance effectiveness
Internal alignment	Capacity to enhance effectiveness by integrating or aligning goals, strategies, and processes of different units and by assessing effects of actions in one part of the system on other parts
Commitment	System-wide commitment to the vision, mission, goals, strategies; and to do what it takes for success
Learning	Capacity of groups and the system to learn from own and others' experience for both problem solving/incremental improvement and fundamental change
Knowledge/Expertise creation and sharing	Capacity to generate, seek, capture, share, and use tacit and explicit knowledge and expertise
Innovation	Capacity to recognize needs and opportunities for, and to get and use, new ideas and approaches to enhance effectiveness
<i>Transformational factors</i>	
External environment	Relevant environments: e.g., market forces, competitive forces, industry dynamics, regulatory environment
Mission/Vision	Organization's central purpose, that reflects core values, is clear, widely shared and believed in, and powerful enough to guide behavior
Strategy	Learning approach to strategy development and execution that involves: (1) strategic analysis of opportunities and constraints in environment, strategies and competence of other organizations, and own patterns of strategic behaviors and competence; (2) repeated testing of insights and choices while planning; (3) effective involvement of key stakeholders in operationalizing strategies
Leadership	Leaders: (1) develop, articulate, and inspire confidence in the mission, vision, and strategy; (2) model desired behavior, including willingness to learn; (3) seek input and listen; (4) help employees work together and understand how personal goals fit with organizational goals
Culture	Beliefs, values and norms that support organizational learning and performance
<i>Transactional factors</i>	
Structure	Division of work and organization of people in ways that facilitate decision making, problem solving, and learning across internal and external boundaries
Management practices	Day-to-day behaviors and practices of managers/supervisors, and the messages conveyed by them, about what is valued and supported that influences performance, collaboration, autonomy, learning, and innovation
Systems	(a) Policies and mechanisms that enable the organization to: access, capture and share knowledge; and support systems thinking and generative learning; and (b) systems, policies and practices that support other aspects of smooth functioning, including, technology, rewards, goal alignment, leadership development, talent management, performance management

(continued)

**Table 2.1** (continued)

Construct	Construct definition
Climate	Shared perceptions of what is rewarded, supported and expected; norms about collaboration, learning, risk taking and trying out new things, including establishment of trust and openness, as well as willingness to share information and discuss differences

this view, successful organizational change involves considerable learning by organizational members and the organization itself. Formal training programs can begin the learning process, but beyond that, much of it takes place informally and through trial and error. Organizations traverse uncharted waters with little possibility of imitating existing models. In such cases, people learn their way through the implementation of change. The nature of change—as well as members’ understandings of it—is an ongoing process of transformation. Spontaneous, grass-roots initiatives are encouraged; successful experiments, learning from “intelligent failures,” and innovation are promoted. Frequent checkpoints are set for reviewing progress, adjusting course, and expanding change efforts as progress is made.

Most successful change processes fall between these two ends of the continuum. Typically, implementation efforts are guided by goals, and by action and transition plans. But, as those goals are approached, new ones are developed.

While a comprehensive, integrated approach to change is often preferred, many leaders interested in leveraging strategic learning to develop and sustain innovation are not in a position to launch a carefully planned, step-by-step effort. What can they do to improve the work processes they do control?

A first step is a careful diagnosis of the organizational factors described above vis-à-vis the challenges faced and the goals that are to be achieved. Diagnosis helps managers to decide on the nature of the interventions to put in place and guides choices about the key leverage and starting points in the specific context. Diagnosis also provides a model or framework that managers can use to make sense of change as they get started.

Even when managers begin with a planned change approach, much occurs that was not anticipated, so a learning approach is always needed as managers experiment and use metrics to assess results and work with key talent to collectively learn their way toward the goals they wish to achieve.

## 2.4.2 This Book

Organizational system models, and diagnostic tools and assessment instruments based on them, have focused on performance as the key system-level outcome, and have addressed system-level learning only incidentally, if at all.

Models and tools that have addressed this gap by focusing on learning as the key system-level outcome have typically ignored performance, and have not been

research-based. As a result, not enough progress has been made in demonstrating how measures of learning can be used to improve performance or in tracking pathways to performance that involve strategic learning.

We are writing this book to illustrate cases that have taken both performance and learning dynamics into account in the pursuit of innovation.

Cases in this book include the following:

- Cases in which we have used survey instruments based on our model to undertake organizational assessments and guide change (Federal Judicial Agency, Ericsson, CASAWORKS)
- Cases in which we have used the model to analyze and compare transformational change (Engineered Woods, Happy Land, South Side High School, AMP Model).

---

## References

- Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (1995). *The boundaryless organization*. San Francisco: Jossey-Bass.
- Burke, W., & Litwin, G. H. (1992). A causal model of organizational performance and change. *Journal of Management*, 18, 532–545.
- Daft, R., & Weick, K. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(1), 284–295.
- Gephart, M. (1995a). High performance workplace systems. In: E.F. Holton, III (Ed.) *Proceedings of the 1995 Meeting of the Academy of Human Resource Development*, Session 19–3, St. Louis, MO.
- Gephart, M. (1995b). The road to high performance. *Training and Development*, 49(6), 29–38.
- Gephart, M. A. (1998). Implementing high performance work systems: Planned change or an emergent learning process. In R. Toracco (Ed.), *Proceedings of the 1998 Academy of Human Resource Development*, Chicago, IL.
- Gephart, M. A., & Marsick, V. J. (1999). *Strategic Leverage through Learning<sup>©</sup>: A model and instrument*. New York: Columbia University, J. M. Huber Institute for Learning in Organizations, Teachers College.
- Gephart, M., Marsick, V., Van Buren, M., Spiro, M., & Lucadamo, L. (1995). *The Learning Organization Assessment Framework*. Alexandria, VA: American Society for Training and Development.
- Gephart, M., Marsick, V., & Van Buren, M. (1997). Finding common and uncommon ground among learning organization models. In R. Toracco, (Ed.), *Proceedings of the 1997 Meeting of the Academy of Human Resource Development*, Atlanta, GA.
- Gephart, M., & Van Buren, M. (1996). Building synergy: The power of high performance workplace systems. *Training and Development*, 50(10), 21–36.
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organizational Science*, 2(1), 88–115.
- Lawler, E. E., III. (1996). *From the ground up*. San Francisco: Jossey-Bass.
- Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the sources of innovation*. Cambridge, MA: Harvard Business School Press.
- Nevis, E. C., DiBella, A. J., & Gould, J. M. (1995). Understanding organizations as learning systems. *Sloan Management Review*, 36(2), 73–85.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.

- 
- Pedler, M., Burgoyne, J., & Boydell, T. (1991). *The learning company: A strategy for sustainable development*. London: McGraw-Hill.
- Redding, J. C., & Catalanello, R. F. (1994). *Strategic readiness*. San Francisco: Jossey-Bass.
- Tushman, M., & Nadler, D. (1986). Organizing for innovation. *California Management Review*, 28(3), 74–92.
- Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization*. San Francisco: Jossey-Bass.
- Wolfe, R. A. (1994). Organizational innovation: Review, critique, and suggested research directions. *Journal of Management Studies*, 31(3), 405–431.

## Joint Work with Bill Goodspeed

---

### 3.1 Overview

Engineered Woods—a division in a diversified, family-owned business—transformed itself from a classic commodity producer to a specialty products business in just 5 years. Its goal in 1995 when it set this strategy was to be 50 % specialty products by the year 2000. Starting from scratch, by December 1997, sales of its two new specialty products had taken off, and suddenly, Engineered Woods could see its dream taking shape.

In 1996, the commodity market for its key product, Oriented Strand Board (OSB), slumped. By 1997, only 10 % of the company's business was in specialty products. But by the end of 1999, the company had reached its original goal: 58 % of its business was specialty products. But OSB prices were also recovering in 1999, and although demand for specialty products was high, so too were production costs. The company faced a choice: continue its transformation trajectory or balance its commodity and specialty lines. Engineered Woods chose to complete the transformation. By 2003, 98 % of its business was in specialty products. In 2005, Engineered Woods continued to lead the category it created despite new competition.

How did Engineered Woods transform itself? Its leader and President explained their success as he looked back over the journey:

- They started with focus so they could get so much better than everybody else
- They developed an organizational skill or core competency to distinguish themselves in a meaningful way from competitors
- And to keep the organization moving in the right direction toward that focus, the leader used a whole-system framework to balance and align various

---

Bill Goodspeed serves on the boards of several family-owned companies, specializing in strategy and next generation development. He can be contacted at [WilliamBGoodspeed@gmail.com](mailto:WilliamBGoodspeed@gmail.com).

organizational elements—the staff, the systems, the structure, the strategy, values, style and culture.

This chapter tells the story of this company’s transformation, and how organizational learning fueled it. The story unfolds in six sometimes overlapping and interactive “acts”:

1. Committing to a vision focused on a risky, breakthrough strategy
2. Learning to develop specialty products
3. Learning to market and sell specialty products
4. Learning to manufacture specialty products that they developed
5. Developing a culture and systems that support innovation
6. Sustaining the revolution.

---

## **3.2 Act I: Committing to a Vision Focused on a Risky, Breakthrough Strategy**

The first step was recognition that a new strategy was needed. This idea germinated in the minds of a few of the company’s leaders.<sup>1</sup> A new VP of Strategic Planning and Business Development (Business Development VP) had joined the company with extensive strategy experience in a well-regarded consulting firm. From early on, the VP carefully watched the business environment and used this information to think about what the company’s strategy should be.

The company was a small but successful player in its market. The kinds of people, processes, systems, and structures needed to support low-cost, high-volume success in the commodity market were very different from what would be needed for success in a high-cost specialty market. Transformation would require organizational learning and change, but it was not clear that the company’s key players were ready to take this on.

At the beginning of this story, the company was perhaps the 5th largest player in OSB, a structural panel that is used like plywood, mostly in construction in North America. The company competed against very large public companies such as Weyerhaeuser, Louisiana Pacific, Georgia Pacific, and International Paper. These wood products compete in a classic commodity market where prices fluctuate greatly. In that environment, low-cost producers are typically the largest.

This Business Development VP was named President in June 1996 at a time when the OSB industry was experiencing the end of 3 years of unprecedented

---

<sup>1</sup> These leaders included: the prior President of Engineered Woods, his VP for Strategic Planning and Business Development (who became the President during the transformation and who was mentored by the prior President for that position), and the visionary President of the parent company of which Engineered Woods was a part.

prosperity. The late 1980s and early 1990s brought the spotted owl crisis in the Pacific Northwest (the spotted owl was listed as an endangered species), which led to a drastic reduction in timber activity on public lands. Dramatically reduced timber supply drove wood costs higher in the West. As a result, plywood plants closed and those remaining charged much higher prices to cover their soaring variable costs. OSB players rode the coattails of this situation for several years. Despite the commodity nature of the product, margins for OSB looked like those for software or pharmaceuticals.

By 1996, however, a flood of new OSB capacity entered the market, bringing an end to boom times. Profits plummeted.

### **3.2.1 A Bold Stretch Goal Amidst Much Skepticism**

The story began in 1994 when the Business Development VP was charged with developing a strategy for the OSB business. Like many OSB strategists at the time, he tried to estimate how long the OSB price boom would last to determine whether the company should invest more in this commodity industry. In the end, the strategy team estimated there was enough play in the industry to support another plant. However, he knew that this approach of “drafting” off favorable industry trends was insufficient for long-term prosperity. He decided the company had to find a viable competitive angle.

Engineered Woods changed its strategy in 1995, setting the vision toward specialty products before the OSB downturn and in spite of skepticism within and outside the company. The shift was driven, in part, by data the Business Development VP collected and discussed with a cross-functional group of key people to get better insight, focus, and buy-in for a strategy change.

In 1995, the Business Development VP invited about 25 managers from all functions to develop a new vision/strategy. They agreed on a rather bold mission statement, i.e., that Engineered Woods would “be the recognized leader worldwide in creating value with Engineered Woods composite panels” and that they would get there through “specialty product development, process innovation, and learning.” Their “stretch goal” was to be 50 % specialty products by the first year of 2000.

Engineered Woods decided they weren’t going to try to be the largest player in the industry. It would cost too much money and being a low-cost producer was not interesting. They instead embarked on a new course, which was to invest in product development and marketing for differentiated specialty products in the industry.

The company’s specialty business was zero in 1995. Consultants, who monitored anonymous voting on the vision, informed the company: “none of your top people really think these goals are attainable. Your sales and marketing people are particularly skeptical.” As well, most of the company’s customers (distributors, retail lumber yards, national chains, etc.) did not distinguish between OSB products, nor could they articulate any unmet needs. Everyone wanted reliable supply and the lowest prices. There was clearly skepticism, within the company and outside it, as to whether or not the company could transform itself, from scratch,



into a specialty products business by 2000. The Business Development VP reflected: “Everyone said it couldn’t be done, including our own people. And certainly our competitors and our customers.”

### **3.2.2 The Challenge: Developing Organizational Capacity for Productization**

When the management team set out to achieve a level of 50 % specialty products from virtually none, it probably underestimated the task ahead. The critical challenge was how to develop organizational capacity for “productization”, i.e., capacity to develop, market, sell and manufacture specialty products (from scratch). This would be Engineered Woods’ “competitive advantage.” Leaders emphasized the importance of “focus” for success. The senior team identified critical skill gaps. These were fairly easy to define, but much tougher to close:

- Product development: R&D was small, located in a small make-shift quarters above a production plant, had no history of new product development, and was devoted mostly to manufacturing efficiencies
- Marketing: No marketing existed. Sales was predominantly an order taking group, and the organization had little experience in market research, finding unmet needs or developing value propositions
- Manufacturing: The manufacturing plants produced commodity products, and the processes were designed entirely for these products.

Organizationally, the company was spread out in several locations with little interaction among functions of the organization such as marketing, sales, and manufacturing that would have to work closely together in new ways to discover, develop, produce, market and sell specialty products.

---

## **3.3 Act II: Learning to Develop Specialty Products**

The priority was to learn to develop specialty products instead of commodities. This required a new mindset, jump started by finding new talent, and supported by new reporting structures, training, and resources. New talent was not enough. New systems had to be put in place to bring the right people together in the right ways to take advantage of talent and other resources.

Building blocks were put in place to support product development. Engineered Woods started an R&D department in 1994 and recruited a new director who had completed course work for a doctorate in wood technology. He, in turn, began to hire the best product development scientists he could. But R&D staff was still small and marginalized. They were housed above one of the manufacturing mills in makeshift quarters and not well understood by the plant staff, many of whom

were not college-educated. R&D was viewed as an unnecessary expense by a cost-conscious company.

Because the OSB industry had little R&D, finding the right kind of talent within the industry was difficult. The company eventually began to attract scientists who wanted to work in product development. Engineered Woods also hired scientists outside the panel industry to bring in other kinds of product development skills and experience. The company tapped product development expertise of a sister division by having the President of Chemicals train its R&D staff on techniques to improve product development such as design of experiments (DOE) software.<sup>2</sup>

Changes were needed to take advantage of what new talent had to offer. In 1994, R&D reported to the VP of Operations, but Operations supported low-cost volume production, not specialty innovation. R&D was moved into Business Development. Engineered Woods invested in R&D. The annual budget increased many fold in the first 2 years of transformation. Eventually, in 1997, a new R&D center would be built next to one of the company's plants to develop capacity and to show the organization (and talent being recruited) that R&D was essential to the business.

Despite all of these steps, progress toward the goal of breakthrough specialty products development was slow. It would take more than good people to build new products. It raised the question: Could they create specialty products? The right people were not working together in ways that took advantage of what was being put in place. Tensions existed between functions that were evidenced in small and big ways. When, for example, the VP of Sales & Marketing commented on the lack of progress in a staff meeting, implying that R&D was not succeeding, the head of R&D testily asked the VP what *he* thought the market needed!

### 3.3.1 New Structures and Mechanisms to Bring the Right People Together

A breakthrough came when the company began to experiment with a multi-functional team approach. This new structure brought together the many different perspectives needed to create a new product. Not long after the 1995 strategy meeting, and after R&D began to report to Business Development, the company tried out a product management approach. A capable individual created product teams with participants from many functions who worked on a problem together. This finally brought people together from across the company and aligned them internally in effective ways to develop new products. The climate in the teams was

---

<sup>2</sup> Design of experiments—developed by “a British statistician named Ronald Fisher . . . for making breakthrough discoveries . . . has become a powerful software tool for engineers and researchers” (Burnham 1998). “Design of experiments provides information about factors and their interactions in systems as varied as aluminum welding and zoo-animal cholesterol. It points out break-through solutions by thoroughly evaluating multiple elements within a process and has become a useful tool for quality professionals” (Ibid.).

one of creativity and fun as well as commitment to breakthrough success. The head of the team was called a “President” to convey the importance of leadership.

The first cross-functional product team was led by one of R&D’s new hires. The team’s charter was to develop a viable product for a potential client that was a market leader. Engineered Woods had not been able to reach the “thickness swell targets” that this client required, so the client had been buying from the competition. Instead of trying to meet the client’s targets, Sales had tried to persuade them to relax their standards. The team was staffed with people who were passionate about developing a new product or at least willing to try new things. It did not include Sales and Marketing because they did not meet these criteria. A key person on the team was a plant manager with a lot of credibility who would eventually help convince production of changes needed to successfully manufacture a new specialty product.

Engineered Woods enjoyed a big product success for the client in just 6 weeks by getting people together to work across functions in a new teaming structure. The team learned from client reps and visited their plant. They used “design of experiments” (DOE) to develop the recipe and process for the new product. Through DOE, team members could learn together, and could then engage other parts of the company in order to change the way things were being done, for example, in Manufacturing, and help the company bring the product to market. In this case, the team member from production made sure the plant learned how to manufacture the product, even though the plant was not initially happy doing so.

This team success helped the company see that, to reach its specialty products goals, changes would have to be made in the way success was measured. There was a conflict between the metrics of commodity production and the metrics of specialty products commercialization. The new product slowed production by 16 % which hurt “footage” numbers, one of two key metrics (the other being costs/thousands square feet) that the head of Manufacturing carefully watched. Variable costs were also higher. Daily and monthly operating reports focused on these numbers. “We had to convince the plants that specialties are in their interest even if production numbers are lower. This was not easy.” They did not change manufacturing measures, but did convince the plant of the value of higher margins for this product.

### **3.3.2 Learning to Use, and Modify, a Stage-Gate Product Development Process**

The company knew it had been successful, but was not sure whether this was just a lucky accident that they might not be able to replicate. So they conducted an After

Action Review (AAR).<sup>3</sup> The parent company had trained employees in all locations in carrying out AARs, and provided incentives and rewards for conducting AARs and sharing lessons learned via a data-base internal technology-supported system. AARs were expected to improve routine operations (continuous improvement) and situations, such as this one, where there has been a success or failure in a non-routine area where gains or losses can be large.

As a result of their AAR, Engineered Woods decided they needed a disciplined product development process, something which the Business Development VP—now turned President—had resisted for fear that it might lead to unnecessary bureaucracy. The President listened to his Director of R&D who noticed that without a process, they wasted time and resources in moving forward without the right market information. The Director had used a similar process at a different company. In the end, the President was persuaded of its value. The process eventually helped the executive team “kill projects that we would have never killed before . . . and spot issues with projects that we wanted to continue with” but that would otherwise be problems.

By 1997, with a re-constituted management team, Engineered Woods had put in place a simple modified stage-gate process.<sup>4</sup> They researched how this was done elsewhere and tailored it to the company. Senior executives infused a sense of fun and creativity, calling themselves Trolls and reviewing each gate to decide on which ideas would pass through to the next stage. It was not enough for a few leaders to embrace the process. They made the stage-gate process a core capability for commercialization. They practiced it by doing it until it became a true organizational skill. After a year of trying it out, they reached a point where, through repetition, they could use the stage-gate process relatively quickly.

### 3.3.3 Training to Support Team Work

People needed to learn how to work together across functions in order to support this new multi-functional approach to specialty products development. Functions were strong, and even when stretched a little bit, things tended to snap back into place. It took time to see the value of a manufacturing person leaving his functional job part-time to go help a product development process. Engineered Woods had

---

<sup>3</sup> AARs, developed originally by the U.S. Army, had been adopted by the parent company as a primary tool for learning from experience. AARs are driven by data collected and analyzed by key stakeholders to determine whether not goals have been achieved, and if so, why or why not. Problems, issues, and concerns are analyzed to find out what went right or wrong without assigning “blame”. Lessons learned are pulled out and used going forward in situations that share similar goals or processes.

<sup>4</sup> “The Stage-Gate model takes the often complex and chaotic process of taking an idea from inception to launch, and breaks it down into smaller stages (where project activities are conducted) and gates (where business evaluations and Go/Kill decisions are made).” (Stage-Gate International, [www.stage-gate-com/resources\\_stage-gate\\_full.php](http://www.stage-gate-com/resources_stage-gate_full.php)).

done a certain amount of team building (including outdoor ropes courses<sup>5</sup>), but still faced strong functional mental models. The President looked for a way to close gaps across functions when identifying and meeting customer needs.

He got personally involved in simulation-based training using Lego blocks that helped everyone to see the consequences of not working together. He brought together 25 primary players in the product development process from various functions. He had built five identical Lego models and put them in five different rooms. He divided the 25 people into five groups of five, and assigned a functional role for everybody on the team. Each team's job was to replicate the Lego model but there was a catch. The team's sales person was the only one allowed to see it. The sales person would then meet with the R&D person to describe what he or she saw. Then only the R&D person would meet with the rest of the team to construct it within certain time limits. Not one of the five models built bore any resemblance to the original model, which itself was not very complex. The result dramatically showed problems the company had when it did not work across functions. It resembled the old-fashioned "telephone" game in which someone whispers something in one person's ear and it goes all the way around a group and becomes dramatically changed by the end. A second round was held, using five more complex identical models. In the second round, teams had less time to look at the model, but all team members saw it at the same time. They then left the room and rebuilt it. In this round, everybody was within 90 % of the model even though it was much more complex.

The Lego-based training helped people visualize and learn the value of bringing different perspectives to bear on a problem. All eyes seeing the problem simultaneously worked far better than handoff systems. They extrapolated to their business. If R&D and manufacturing representatives could meet with the customer and with the sales or marketing person, they would get better insights into the problem and how to solve it, rather than relying solely on a salesperson to interpret the problem and then suggest solutions.

### **3.3.4 Building on Lessons Learned**

Other product development teams were formed that learned from the first team. The President himself hand picked and headed another product development team that was to develop for Engineered Woods the second breakthrough specialty product (weather resistant sub-flooring) that created a new category in the industry and enabled the company's huge success. This team also encountered new challenges that led to new learning, innovation, and knowledge sharing through iterative cycles of experimentation and learning over an extended period of time.

---

<sup>5</sup> Ropes courses are typically conducted outdoors and involve a series of increasingly more difficult physical activities. Success for each person, and the team, depends on collaboration among team members.

The President staffed his cross-functional team with people who also embraced change, including a field salesperson and someone from marketing. This team conducted market research, identified a product opportunity, and developed a new water-resistant sub-flooring product in the R&D lab by early 1997. The product was designed to solve a key problem with OSB, that is, exposure of boards to moisture during construction, which caused edges of panels to swell and required call-backs to the site to sand down the bulges, which cost builders both time and money. Through market research with builders, Engineered Woods had learned that a product that resisted moisture and eliminated this edge-swell could be a big success. The team solved the problem relatively quickly by building on the new resin used in the first successful specialty product developed.

Although production costs were high, the team believed that the product could be sold for considerably more than the commodity OSB price. A marketing plan was put together that included a 50-year warranty (double what was standard), a 90-day price control set below the price of average plywood but above that of most OSB flooring, and a clear edge seal that gave the product a different look from most OSB products that were typically painted with color to reinforce the product's unique positioning in the market.

In developing this new product, the team benefited from a shift in the way that Engineered Woods marketed its products, that grew out of recruiting new marketing talent. They focused on identifying and marketing to the *builders*, who were the ultimate consumers of wood products, rather than focusing on the *intermediaries that sold to builders*. New marketing approaches had identified different customer needs.

Marketing showed that changes were needed in other functions to support specialty products. The new team had a good marketing plan in place, but the company could see that the challenge in bringing the product to market involved further transformation in sales and marketing and in manufacturing.

---

### **3.4 Act III: Learning to Market and Sell Specialty Products**

Act III shows how Engineered Woods learned to market and sell specialty products. Stepping back in time, before the new strategy was put in place, Sales & Marketing was one of the two most powerful players, the other being Manufacturing. These two groups worked symbiotically in the well-respected OSB commodity business.

The old strategy involved little marketing, which consisted mostly of attending trade shows and rare use of advertising. Most customer contact was by phone while doing commodity "trades" or fulfilling commodity contracts. The company's Sales and Marketing group kept customers happy in the commodity OSB market, but in doing so, it isolated itself from the rest of the company. The highly successful Head of Sales ran a closed shop, with everyone located in a large open area where it was impossible to say or do anything without his knowing it. Market information was passed on to others by word of mouth and sales information was not regularly

posted or highly visible. Visitors—including customers and even the company's President—had to call before coming for a visit.

Sales staff were not incentivized to do anything differently and resisted doing so. Sales tracked progress by measuring realized price per thousand square feet (MSF) of OSB. They only monitored sales of thicker panels, like sub-flooring which had slightly higher realized price per cubic volume.

### **3.4.1 Hiring and Learning from Consumer Marketing Talent**

Several months into the new strategy, Engineered Woods had hired a new VP of Sales and Marketing who steered the Sales organization toward higher levels of customer service and interaction, in part to learn more about the problems or opportunities of customers. The next step was to hire a new Director of Marketing, which generated an internal debate. The VP wanted someone experienced in marketing OSB while others contended that there were no good marketers in the industry. In the end, Engineered Woods hired a marketer from a consumer foods company who knew nothing about OSB. At the time, many people—both internally and externally—questioned the decision. Why would a foods marketing person know anything about wood panels? But the new hire had valuable consumer marketing skills.<sup>6</sup>

Marketers in the OSB industry were not typically consumer oriented. Hiring consumer marketers was one of the most important steps taken in transforming the marketing organization, one on which the company continued to rely. Engineered Woods used their marketing people to infuse new thinking into the organization: by osmosis and by organized efforts such as using marketing people to educate manufacturing people about branding. The company built consumer marketing skill that then spilled over into the rest of the organization.

### **3.4.2 Discovering Builders and How to Market to Them**

New marketing expertise led to market research that revolutionized the business. It generated new insight into what home builders wanted, which, in turn, drove new product development. Engineered Woods began conducting sophisticated market research with primary users of products: home builders.

Engineered Woods used to focus on their immediate customers, that is, distributors; but distributors did not have the same insights as did builders who were the company's end users. The company learned how to market to builders by trial and error and through focus groups. In doing so, they were definitely plowing

---

<sup>6</sup> When the original VP of Sales and Marketing began to temper his enthusiasm for specialty products, in the wake of a recovering OSB market, this foods consumer marketer became the new VP of Sales and Marketing.

new ground in the industry. The company had an “epiphany” when they found out that builders do not trust manufacturers. Builders said they trust “what other builders were doing and what they had to say about it” or “what their local lumberyard or retailer recommended.” This insight led Engineered Woods to change its approach. They thus uncovered significant unmet needs that led to the development of a high performance, moisture resistant sub-flooring product.

Following this success, the company completely renovated its approach to marketing, including incentives. Engineered Woods discovered that distributor partners would not “push” new products as much as needed so the company created a “pull” marketing campaign focused on builders. They cut back on traditional advertising and focused on builder referral programs. If they had advertising, they would feature a local builder recommending the product. They focused incentives and education on retailers and found out it had a dramatic impact on sales.

The company also changed its approach to branding. Branding combines creating solid value propositions and effective communication of the proposition to targeted customers. But the industry’s mental models were getting in the way of effective branding. So the company brought in a fresh pair of eyes to gain new perspective. They switched advertising firms from one with OSB industry experience to one with no industry experience whatsoever that could try out new approaches without being hampered by stereotypes.

### **3.4.3 New Marketing Approaches Led to New Sales Approaches**

The new marketing approach pushed Engineered Woods to grow its field sales force to interact with builders, which required learning a different value proposition. The company focused sales directly on builders instead of distributors who were seen more as partners, not customers. They did so formally and reinforced it through trial and error practice.

Sales staff, who had resisted selling a product that might compete with its well-performing, bread-and-butter commodity OSB, began to get on board after seeing the success of the new approach. An early such success came when the Sales Director, a member of the team that developed the new water-resistant sub-flooring product, convinced a dealer and builder to try the product. They offered the product without cost and used this success to sell to other builders and dealers. Sales staff held breakfasts to discuss the new flooring, inviting the full range of contractors and builders from high to low end. The merits of the product, which reduced call-backs, appealed to low-end builders as much as to the high-end.

Engineered Woods trained the sales force to sell on benefits, not price, which is the value proposition for builders. That was a shift. Builders got interested, tried products and demanded them from retailers/distributors. Once this happened, virtually all distributors became believers; some even began to compete for more volume of the company’s specialty products.



### 3.5 Act IV: Learning to Manufacture Specialty Products

The plant had to learn to produce specialty products at commercial scale. No one could tell them how to do this, even though some suppliers thought they knew how to do so. Thus, the company had to learn, mostly through trial and error, how to manufacture these new products.

Perhaps even more importantly, a first step was in learning to overcome resistance to doing so. The head of Manufacturing had been in the business a long time and wielded great influence over the plants. Eventually, he retired and became a part-time consultant, and a new head of Manufacturing was appointed. But even before that happened, the inclusion of key leaders from the plants on product development teams eased the transition. These leaders acted as credible go-betweens who helped the plants learn to manufacture specialty products even though mental models and metrics on which incentives were based supported commodity manufacturing. Plant staff were mostly home-grown. Many were not highly educated and had worked in the plants a long time. They did not interact beyond their plant walls and rarely talked with anyone from Sales and Marketing. The commodity culture had to change for new learning to occur.

The first specialty product did not pose as many challenges as did the second. The company then switched resin systems, opening new product opportunities, and experimented in one plant to commercialize the process. Their commercial resin suppliers did not know how to make the change so they had to develop the skill themselves. Organizational learning occurred as members of the multi-functional product development teams used design of experiments (DOE) to learn the skills and process of manufacturing with new resin systems.

There was a good fit between DOE and knowledgeable people in the plant experimenting to figure out how to do things. Through trial and error, the plant learned what to do and trained its people. Leveraging the judgment of manufacturing specialists avoided huge mistakes, many of which could have been innocently made. By integrating Manufacturing into the product development team and using DOE, the company figured out how to successfully manufacture the new product.

They learned to successfully produce the new product in one plant, get comfortable with it, increase production and speed, and then would introduce it to the other plants, using the same or a similar system. They started innovating around the platform. They would come up with ideas and share those back among the other plants, through either informal contact or formal meetings or through engineers that moved across plants.

Eventually, Sales and Marketing began to interact more regularly with Manufacturing. Plant people visited work sites and learned from the customer how the product was used and what quality problems had to be fixed. One plant manager became a field sales person, and because he knew people in the plant well, and they trusted him, he was able to confirm what was going right and help the plant see what needed to be fixed. Sales worked more closely with Manufacturing on the finishing of the products, and Manufacturing began to collaborate with Sales in the

sales planning process because the two were so interactive. Eventually, a production planning person was added to Sales who became a go-between with the plants.

---

### **3.6 Act V: Developing a Culture and Systems that Support Innovation**

The company learned over time to change its business from commodities to specialty products, a transformation that required many changes in the way the organization worked. The President himself brought innovation to the mix. He was an innovative outsider with experience in strategy and change management. He brought in highly talented people, often from outside the industry, in critically sensitive positions who leveraged what they knew to support change. People experimented with new product development structures. But the President also knew that it would take more than creative individuals, enthusiasm, and commitment to change to make a successful transition. The culture and systems of the organization also had to change so that organizational learning and new productization capabilities were ingrained in mental models, mechanisms, and practices.

#### **3.6.1 Changing Leadership at the Top**

A key step, one that the President took his time in taking, was changing the leadership at the top. At the beginning of the company's transformation journey, senior managers recognized the reluctance of the new President to let people go who had built a reputation with the company. But by mid-1997, this orientation had changed. That year, the President replaced many members of his senior executive team in favor of a group of people who were open to change to specialty products. He hired a new head of Sales and Marketing and placed him over the prior head, who then left after a few months. He replaced the head of Manufacturing, retaining the former head as a part-time consultant. He had added a new executive from consumer marketing, a new head of Finance, and a full-time General Counsel. All came from well-recognized companies and brought with them many years of valuable experience.

The senior executive team was both creative and collaborative. They often met informally to discuss strategy while working at different sites, eating meals together, playing golf, or engaging in leisure activities. They continued to ask critical questions about the strategy. They participated in sales meetings and helped develop the stage-gate process. They were seriously committed and worked hard, but they also had fun and helped to create an environment that was innovative and fun-loving.

### 3.6.2 A Culture of Innovation

Extraordinary steps were taken to create a new culture of innovation, including changes in office space and physical environment, clothing, and patterns of interaction. Internal marketing was every bit as important and difficult as external marketing. Seeking consistency between the two, the President created a culture—a style, if you will—and values that “screamed innovation.”

A key step was moving out of old offices that had reflected a low-cost, somewhat shabby-looking, cost-conscious commodities culture. The President realized that culture is pervasive. It is a byproduct of organizational elements, but it is also a driver of those elements and it can be actively managed. He saw that there were things he could do to create a culture: the design of the office, what kinds of things he put on the wall, where he spent his time, what kind of clothes he wore, who he talked to and when, what questions he would ask. As the leader of an organization, many things he did created the culture in addition to the kind of people he hired or let go.

Engineered Woods, which had been spread out over many sites, moved to a new office even though there were several years left on some leases. The company spent a lot of time designing new offices with “funky architects” to create something that would communicate to all employees that this is a different place to work. They used cutting edge architecture and a fairly open office physical environment. Unlike the old office, they decorated the offices with product samples and, over time, with awards received for innovation and quality products.

The President encouraged a non-hierarchical approach where doors were open, people gave each other high-fives in the hallway, and there was lots of laughter. People got kudos for coming up with innovative solutions and rewarded, rather than the opposite, for trying to innovate. It became an informal blue-jean culture. People were promoted who were innovative, risk-taking, and change-oriented.

Incentives were changed to support the new culture. In the past, all senior managers had the same incentive plan, with 70 % of their bonuses based on the company’s overall sector performance that included timber and coal subsidiaries. The remaining 30 % was based on corporate performance and non-financial critical success factors such as safety. The incentive system was completely reversed. No part of the new bonus was based on timber and coal subsidiaries. 70 % of the bonus was tied to corporate performance and 30 % to non-financial critical success factors.

Every person’s paycheck was based on an incentive plan. The sales force’s bonus was based on the new specialty products rather than commodity OSB. A highly visible scoreboard was put into the Sales area so that everyone knew how the company was doing. Plant bonuses were based on a new formula that did not discriminate against specialty production, so that plant staff began to get 10–15 % bonuses on each paycheck when specialty product manufacturing was high.

### 3.6.3 Systems and Processes

Critical changes were made in work systems and processes that brought people together to work across functions and that embedded skills in using trial and error oriented to new product development. Stage-Gate and design of experiments processes have been mentioned. But other processes were also introduced, tried out and changed, such as a modified Six Sigma Quality process that was tweaked to focus on new product development rather than discovery and correction of routine errors. Training was introduced to support the use of processes throughout the organization.

The systems, focused on work, helped overcome different views and conflict in ways that team-building exercises alone had not accomplished. Team building exercises can be fun, and often involve important learning, as did the ropes course or Lego exercise. By themselves, however, they do not erase long-standing friction. If the underlying problems and organizational elements are not right or in place, it does not matter if team building creates great camaraderie with peers. The good feelings fall apart in the face of fundamentally conflicting forces.

Employees were helped to set their sights on tangible stretch goals that involved learning. Coaching and training were used; and trial-and-error was encouraged. The message became: It is okay to challenge the status quo. Steps were taken to replace “a culture of niceness” with an inquiry culture in which people were not “shot down” when they challenged established beliefs.

Many things were done to facilitate learning and knowledge sharing. For example, Engineered Woods conducted AARs as was mentioned after its first big specialty products success. Staff made it a practice to send AARs to peers in other plants when helpful or relevant. Regular meetings were used to share thinking and do problem solving. The executive team met monthly, and also got together informally to “kick around ideas.” Through weekly teleconferences and quarterly meetings, Sales and Marketing shared information, strategies and techniques, what was working and what was not.

New ideas came through new hires. The company also did a lot of external benchmarking. For example, they visited more than half of the manufacturing facilities in the industry in the world. They documented practices and shared them with their plants. The biggest impact came from knowing what was possible, which in turn, motivated employees in new ways.

People also got ideas by learning from one another. They moved around the company through team and other approaches and spread new ideas widely. They would teach a best practice to another plant. The company’s formal people development process also moved people around to different locations and different functions.

### **3.7 Act VI: Sustaining the Revolution**

By 2003, 90 % of Engineered Woods' business was specialty products. In 2002, the President left that division to take a position elsewhere in the parent company. The CFO, who was hired in 1997, took over as President. He joined the company with an MBA and extensive management experience in different functions (marketing, manufacturing, finance) in well-known companies.

#### **3.7.1 Company's Strategy and Market Position**

Engineered Woods continues to pursue its specialty products strategy. Despite competition in the category created by Engineered Woods, demand is still high for its moisture resistant sub-flooring product. The company is recognized as a quality brand leader and still holds a commanding market share of high performance flooring, especially in the Eastern half of the United States. Most competitors offer a mid-tier or enhanced commodity that provides some of the benefits of the Engineered Woods product at a lower cost, so competitors have taken share away from the commodity world more than from the specialty market targeted by the company.

A challenge to growth, which has increased over time, is the company's own capacity—even with new mills and capacity extensions at older mills. Engineered Woods continues to develop its organizational capability to get and better manage capacity, for example, through improvements in its supply chain and by developing an engineer group that can better develop proposals where payback is the highest.

Engineered Woods is not putting all of its resources into its two original specialty products. New products have been introduced and are in development. For example, one new product on the market extends the concept of moisture protection to wood products for the roof using a paper overlay, instead of felt, as a secondary moisture barrier along with tape that seals the seams. This product grew out of an idea developed by someone from Sales and someone from R&D who tried to develop a one-step sub-flooring product. The idea did not work for sub-flooring, but was picked up and used successfully with roofs as well as tested for other purposes.

#### **3.7.2 Organizational Learning and Knowledge Sharing**

The company continues to improve organizational learning and capacity building. A management package of information is used to check on the status of initiatives and to identify problems. A monthly staff meeting provides opportunities to talk about what's going right and what's going wrong. The executive team keeps in

touch with all functions. The President and his executive team periodically take a look at their strategy and identify ways to close gaps between current and desired goals.

After Action Reviews continue to play a role in sharing of best practices. Some plants are specialized, but bigger market positions require production at all plants to manage transportation costs. Lessons learned are shared across plants. The leader of the Operations team holds a monthly meeting with plant managers in which they review priorities and best practices. The meeting is often held at different plants so that managers can see practices in operation for themselves. When significant issues arise, the executive team pulls together a group from relevant functions (e.g., Operations, R&D) almost like a S.W.A.T. team to focus on, and solve, the problem.

### **3.7.3 Supporting Systems, Staff, Structure, Culture**

The company has modified and improved the multi-functional product development team model. The stage-gate process has been further refined and is still in use, as is the Six Sigma process. A focus on marketing and branding continues to be critical. New hires continue to be brought into marketing with expertise from consumer marketing. The company tracks perceptions of its brand against competitors in the same ways as do consumer marketing organizations.

Much resistance in Manufacturing to specialty products has disappeared, but the company faces a constant challenge, not unusual in many organizations, in managing costs while at the same time maintaining quality and perception of a premium brand. Engineered Woods faces an uphill battle with finding new hires, many of whom have worked in the commodity world, and who have to be helped to think differently about specialty products.

Leadership continues to build a culture of innovation to support specialty products in several ways. They continue to look for people within the industry/business who have the capability to take a different approach or to go outside the industry in order to make sure the right people with the right ideas are in place. Then they continue to focus on their vision of specialty products and to communicate and reinforce the specialty strategy. To support innovation, the company has to be willing to accept mistakes and not shoot the messenger and to reward risk taking.

Metrics and incentives are managed to support innovation and to make sure that staff aren't penalized for the specialty manufacturing and new product initiatives. The process has to be monitored to make sure that metrics do not drive the wrong behavior because of some unanticipated impact that can squash innovation.

---

## **3.8 System Dynamics: Our Model**

Engineered Woods changed its vision and strategy. It set a stretch goal of transforming from a focus on commodities to specialty products. A key challenge for achieving this goal was commercialization. Engineered Woods developed the

organizational skill to innovate over time through “productization”—a mix of product development, marketing, sales, and commercialization capabilities unique to the industry. Over time, Engineered Woods became a different kind of organization.

As noted earlier, the story of Engineered Woods’ transformation unfolded in six sometimes overlapping and interactive “acts” or phases:

1. Committing to a vision focused on a risky, breakthrough strategy
2. Learning to develop specialty products
3. Learning to market and sell specialty products
4. Learning to manufacture specialty products they developed
5. Developing a culture and systems that support innovation
6. Sustaining the revolution.

A key dynamic in Act I was change in the external environment: Shrinking markets, competition, and environmental protection policies affecting wood products. A new leader worked with a cross-functional group of stakeholders to develop a new vision and strategy—specialty products rather than commodities—along with a stretch goal of 50 % specialty product sales in 5 years. The senior team diagnosed the key challenges and skill gaps they needed to address.

Act II shows how steps taken in new product development were building blocks toward implementing the vision and strategy. A key dynamic was stimulating innovation by bringing in new talent (product development scientists from outside the panel industry). The leader put new structures in place to support new product development. For example, he reorganized R&D and had it report to Business Development rather than Operations. He put together cross-functional product development teams to foster communication of the “right people” across boundaries. He followed advice from key leaders and adopted a new Stage-Gate process, and put changes in place needed to manufacture new products. The climate began to shift within cross-functional teams to support innovation. New teams were committed to breakthrough success and fostered a spirit of fun, creativity and collaboration.

Early successes proved the company *could* develop a new product, but it needed capacity to market and sell specialty products. Key dynamics in Act III were both stimulating further innovation and building internal alignment. As in Act II, the catalyst was bringing in new talent, in this case a consumer marketer who infused new thinking by working with people throughout the company and by educating Manufacturing about branding. New structures, processes and systems were initiated. Marketing strategy completely changed, with a focus on builders, not distributors. A new advertising agency was hired that developed a “pull” marketing campaign and rebranded the company’s marketing strategy. Sales staff learned to sell on benefits instead of price. Incentives were put in place to support the new approach to marketing, along with new metrics (higher profit on lower volume

versus low cost). Over time, these changes led to external alignment as builders tried new products and demand increased.

The challenge in Act IV was learning to manufacture specialty products. Groundwork had been laid by including a key leader from Manufacturing on the new product development team. He acted as a credible go-between to help plants learn to manufacture specialty products. New processes (design of experiments) had been introduced to manufacture the company's second new product. It required a switch in resin systems in one plant. The plant—after learning through problem solving and trial-and-error—developed this capability, perfected it, and then shared what was learned with other plants. A hallmark of this process was collaboration and knowledge sharing, within plants and across plants; and between Manufacturing and Sales and Marketing (including adding a production planning person to Sales as a go-between with plants).

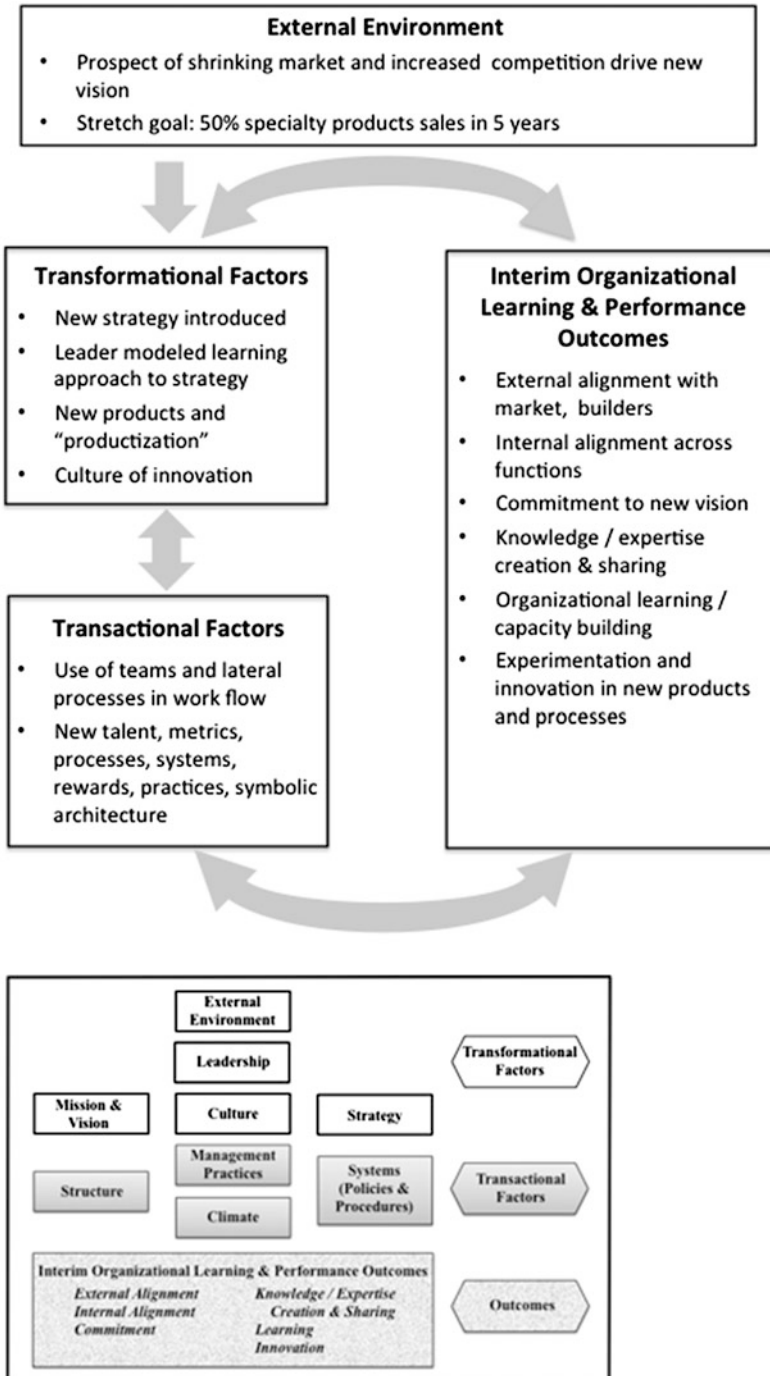
Act V describes how the company consolidated gains and developed a culture and systems that supported innovation. The company could not reach its specialty product goals without fundamental changes in thinking and working supported by new structures, mechanisms, processes, practices, and work climate. New talent, often working across boundaries, catalyzed change.

Some senior managers resisted the transformation. The President worked around them for a while, but began to replace members of his senior executive team. The leader developed a creative, collaborative, informal learning culture within his team that also modeled the vision of specialty products transformation. Headquarters moved to redesigned offices with cutting edge architecture, displays of new products, awards received for innovation and quality. New space was designed for R&D and Manufacturing. Leaders adopted a non-hierarchical, participative approach to management. Two key changes were in the incentive system and the measures used to report results and progress. A highly visible scoreboard was put into the sales area so that everyone knew how the company was doing. Learning was ongoing, collaborative, informal, and modeled by leaders.

The President used the McKinsey 7S Model—developed by Thomas J. Peters, Robert H. Waterman, Richard T. Pascale, and Anthony G. Athos (Peters and Waterman 1980)—to help him pay attention to misalignment. All elements of the model—which was developed in the 1980s at the consulting firm, McKinsey—begin with the letter “S”, hence the “7-S” model. These elements include: Shared Values, Strategy, Structure, Systems, Style, Staff, and Skills. The President and his executive team used the model to align the company during phases of the change initiative by diagnosing and closing gaps to support the revised vision and strategy of the organization.

Figure 3.1 summarizes key system dynamics in the Engineered Woods case as reflected in our model, *Strategic Leverage through Learning*®.





**Fig. 3.1** Key system dynamics in Engineered Woods case with schematic of our model (Fig. 2.1) included for comparison

---

## References

- Burnham, R. (1998). How to select design of experiments software. *Quality Digest*, [www.qualitydigest.com/magazine/1998/nov/article/how-select-design-experiments-software.html](http://www.qualitydigest.com/magazine/1998/nov/article/how-select-design-experiments-software.html)
- Peters, T. J., & Waterman, R. H. (1980). *In search of excellence*. New York: Harper & Row.

---

### 4.1 Overview

The Happy Land Amusement Park case begins with a tragedy that occurred when festering problems were undetected or ignored—due in part to the confluence of factors related to leadership, culture, structure, and industry conditions. In this case, tragedy served as a wake up call. Safety improvements became the vehicle for organizational learning and change, but they were not enough to prevent a second fatality. New hires catalyzed deeper learning and change. Innovation in daily practices triggered other changes and ultimately transformed the Park and its culture.

This chapter is about two Park fatalities and the subsequent actions taken to institutionalize safety. It is also about an organization that learned that these fatalities were symptoms of a troubled culture. Not unlike many companies, the Park’s “good” safety record was misinterpreted. Available data that pointed to a different reality were not heeded and not circulated. With no apparent need to look further, the Park’s history cemented into place an attitude that safety was plain common sense. As long as they were not having accidents the Park was presumed to be “safe.” Safety itself, while prominent in *theory* as a valued cornerstone, in reality was managed only to the extent that rules were established, employees knew them, and guests were expected to follow them. This fragile assumption worked as long as everyone *did* follow the rules. As the Park learned, the machine-like efficiency of this system was ill-prepared for the unanticipated consequences of one person’s misconduct. The Park reeled “from the horrible experience.”

---

This chapter is based on K.H. Wall (2011). Dr. Katherine H. Wall is Travelers EDGE Program Manager, Central Connecticut State University. Contact information: 593 Andrews Street, Southington, CT 06489, 203-671-1613.

### 4.1.1 The Amusement Park

At the time this case was being written, Happy Land Amusement Park was as charming as it was big. It was considered to be a “large park” by industry standards given an annual attendance in excess of one million visits. The Park stood out in the industry because of its friendliness, cleanliness, and attention to the “guest experience.” The sprawling facility covered many acres and was meticulously maintained and heavily themed. Among its arsenal of attractions was a combination of 50 rides and attractions between the waterpark and ride park. The Park’s rate of growth had been exponential. A little over 10 years prior to the writing of the case, the Park’s attendance was a fraction of the total it subsequently drew. As the Park grew, so too did the full time staff. A small core of approximately 50 people worked in Administration, Sales and Marketing, Operations, Safety, and Maintenance. A seasonal staff in excess of 2000 were typically hired and trained for the Park’s May to mid-October operating season.

Customer comments posted on the Park’s website and blogs, as well as various travel websites specifically mentioned the friendly staff, cleanliness of the grounds, and great selection of rides. Unlike large branded theme parks where the atmosphere was harried and overwhelming, and the cost often exorbitant, Happy Land Amusement Park was family-friendly. One website that rated Happy Land along with other amusement parks stated that the Park’s success was the direct result of its upper management team that truly cared about its guests and employees.

### 4.1.2 Park Leadership

The leaders<sup>1</sup> at Happy Land varied in their length of service and had complementary skill sets. See Table 4.1 for a description of leaders and their roles. While Ethan, Meg, and Karl all worked at the Park at the time of the fatality, only Meg was in a management position with clear links to the accident itself. It was later that Ethan was promoted to upper management, and Karl was promoted to management. Only Meg grew up in the industry. Each of the others was hired from the outside for their technical and/or management skills. More specifically, Kevin and Paul were hired from other process and heavy industries. Elsewhere, both had accumulated decades of maintenance management experience, and had been through cultural change at other organizations.

Ethan and Kevin were members of the executive management team and General Managers. Ethan had overall responsibility for Administration including accounting, finance, safety, and insurance. Kevin had overall responsibility for Operations including Ride Operations, Waterpark Operations, and Maintenance. Meg, Paul, and Karl were functional managers. Meg was responsible for the Ride Operations

---

<sup>1</sup> All names used in this chapter are pseudonyms.

**Table 4.1** Description of leaders' roles and responsibilities

Leader's pseudonym	Leader's roles and responsibilities
Ethan	Member of Executive Management Team and General Manager for 3 years as of the time of case preparation. Overall responsibility for administrative functions—including accounting, finance, safety, insurance
Kevin	Member of Executive Management Team and General Manager for 3 years as of the time of case preparation. Overall responsibility for Operating Departments, including Ride Operations, Waterpark Operations, Maintenance
Meg	Functional Manager responsible for Ride Operations. Employed for 14+ years at the time of case preparation, having served as Director of Rides for 9 years.
Paul	Director of Maintenance; one of newest members of management team at the time of case preparation. Engineer known to family owners who was hired following the first fatality to revamp the Maintenance Department and build a safety program and safety department. Promoted to Executive Management when Park was ultimately reorganized.
Karl	Functional Manager responsible for Park's overall safety program. Served as Director of Safety for 3 years at the time of case preparation.

department. Paul held responsibility for Maintenance, while Karl served as the Director of Safety.

---

## 4.2 Phase 1: Learning from a Fatality

The case covers the decade from 2000 to 2010. During this time two fatalities rocked the Park. A consequence of these two fatalities was fundamental change in the ways in which the amusement park as an organization approached ride operations, maintenance, and safety. More importantly, the Park reorganized to ensure that its structure allowed for specific focus on issues and gaps in desired performance.

The first fatality—on the Park's signature ride—required urgent attention. A debriefing was held that first night. Other meetings took place in the days and weeks that followed. In addition to rebuilding the public's trust in the ride, the owner and managers also worked to restore their collective confidence in their ability to deliver a safe experience. Discussions centered on ways to ensure that such an accident would never happen again. They concluded that a major thrust would be to "tighten down" on the rules, and to become "vigilant."

### 4.2.1 Framing or Blaming

Some of the leaders said, “Their park and the ride operators did all that they could” and commented that the accident itself was the result of actions of one customer taking the ride that “were just crazy.” As a consequence, two critical ideas about rider behavior were formed by management. First, the guests could not be trusted.” Second, they realized there was little they could do to control guests’ behavior during the course of a ride.

### 4.2.2 Building Alignment

Meg, the Ride Operations Director, described the fatality as “a big eye opening experience.” She took specific action. Her strategy was not only to “tighten down,” but also to do more to communicate the existing rules, thereby transferring more legal responsibility to the rider. For example, ride signage was changed and included the State’s Rider Responsibility Law. In addition, more extensive directions for riders were added to the existing signs, and audio taped safety instructions were set to continuously play in the queue lines. Printed materials such as park maps were also updated to include notification of the state’s Rider Responsibility Laws, and to emphasize the importance of safe riding behavior. The Park’s zero tolerance policy for behaviors classified as rider misconduct (e.g., such as standing up on roller coaster lift hills) was supported by video taped surveillance. Violators were swiftly ejected from the Park grounds. To ensure consistency and alignment of its safety message, all advertising was carefully reviewed to ensure that safe rider guidelines were featured. This included safety adherence in all photographs and images used internally and externally in which rides, slides, and attractions were displayed.

### 4.2.3 Framing New Policies

Meg was described as becoming “*über* safe” and “on pins and needles” from that day forward. To strengthen enforcement of existing rules, Meg reviewed and revised employee training more thoroughly in the off-season. One of the benefits of being a seasonal operation is that the off-season is a time for reflection and action—including attending safety training. While some of the actions taken by Meg may have been incidental to the accident, others were a direct result of the fatality. The fatality spiked an interest in close monitoring of the rides. For example, Meg spent time on the loading docks of rides and watched what happened. Much to her chagrin, she observed that some customers circumvented ride restraint systems on the Park’s roller coasters. They tied the lap bar restraints in the “open

position,” and thus, were able to experience a sense of weightlessness called “air time” during the ride that heightened their thrill. Seeing this caused Meg to heighten her concern about ride safety and solidify her belief that guests could not be trusted. In sum, she concluded that *she* had to think about their safety because *they* did not. Taking what she observed to heart, she also changed the job descriptions and the rules for the ride operators. For example, in a Ride Department Standard Operating Procedures Manual, she ensured that two pages were devoted to employees’ duties specific to safety. Here “enforcing the rules” was highlighted, and “Code RM—Rider Misconduct” was outlined in detail. The Manual then described in brief the various known ways that guests consciously and purposefully circumvented safety restraints, how to prevent these behaviors by taking specific actions, as well as specifying ways to report rule violators to department management.

#### 4.2.4 Monitoring Performance

Meg also instituted a program monitoring the actual practices of ride operators. As a result, she learned that her ride operators were slacking off on safety enforcement at about mid season. The results of these practice audits were discussed with the ride crews. The data were also used in meetings she routinely conducted with her seasonal management staff to collectively look for ways to improve the operations.

#### 4.2.5 Reframing

With these changes, the Park’s Ride Operations Department team *thought* they were on the road to recovery from the fatality. Meg learned to look continuously for, and capture, data; she discussed findings with her seasonal staff, and conducted safety meetings in her department. She said during her years at the Park she has learned to appreciate and to listen to Code Cs (guest complaints), and has often gained valuable insight from first-person accounts of guest experiences.

When mid-season corrections were needed, Meg conducted or directed mini scenarios to ensure that her ride operators knew what to do in emergency situations. Her willingness to work with her ride operators provided them with important access to her. They became accustomed to seeing her in the Park and to her working alongside them. She thus observed them “when acting normally” and learned just what “normal behavior” was. Meg also collaborated with other departments, notably the Maintenance Department on whom she depended, and the General Managers with whom she frequently interacted. She used what she learned in all facets of her work, and from conversations with others, to modify practices, and to create or improve new safety training programs and documentation. As the Park’s

attendance base grew, ride capacity and wait times also grew, but Meg ensured that safety was not compromised just to gain speed or ride capacity.

---

### **4.3 Phase Two: A Deeper Dive**

While the Ride Operations Department took considerable steps to respond to the accident, the Park's owner went further. After the first fatality, he stepped back and looked critically at the Park's safety record and safety program. He added a new person, Kevin, to the Park's management team. Rather than hire someone with industry credentials, the owner hired someone he knew and trusted—a man he felt came to the Park with the “expertise, knowledge, and process” needed to “take the lessons learned from what was going on in the industry and use them to overhaul the maintenance department as well as to build an independent safety program and department.” With support and commitment from the top team, Kevin did exactly that. His actions were clear, specific, and systematic. He focused on capturing and sharing data and putting it to use to address safety challenges. He learned that the safety problems and challenges faced by the Park were widespread in the amusement industry as a whole—an industry whose safety practices he believed were at least a decade behind those of heavy industry.

#### **4.3.1 Diagnosing the Larger Problem**

Working systematically, Kevin captured data to assess the company's management in action. He looked at its current structure, processes, and practices, and came away alarmed. In reviewing the Park's Workers' Compensation claims, he discovered they were beyond the range of industries with much greater exposure. He immediately “knew there was a problem!” He reviewed the Park's existing Safety Program, and discovered that, in effect, “it was nothing more than words on a page.” Working with the head of administration, he learned two critical things:

- The Workers' Comp rates were sky high.
- The Park had an extremely difficult time getting anyone to bid on its insurance.

When insurance companies did submit bids, the premiums were outrageously high. With an urgent need to act, and a mandate to do so, all of the evidence pointed toward the fact that while Safety was a “First Cornerstone” of amusement park operation, no emphasis was placed on it. As it happened, this would change, but it would take time measured in years and would proceed in “baby steps.”

Working methodically Kevin rewrote the Safety Program. Like Meg, he made it a point to be out in the Park. He worked with small groups and individuals and



people in crews and work groups to talk about safety. He not only talked, he listened to their concerns. For example, he learned that the maintenance men did not have safety glasses. He discovered that the Park charged employees to replace lost safety gear, and worse, no one enforced the replacement policy. When he inquired, no one even knew where to purchase safety gear. He bought safety glasses and outfitted the men. He audited backstage areas in revenue departments and found they used every nook and cranny for storage, effectively blocking the emergency exits and sprinkler heads in the process. He met with resistance when he took away the use of these “storage areas,” so he worked with the department heads to find them new ones.

In addition to correcting practices and rewriting the Safety Program, he realized that, to make further progress, he also needed injury data. From existing sources, he cobbled together statistics and developed a searchable database program. With data on type of injury, frequency, and severity, he now had an idea about where to focus and prioritize his efforts. Importantly, he knew that if the safety program were ever going to work, it needed to be more than an edict from management. It needed to become important to everyone, and that meant he had to gain commitment to build a shared vision of safety.

### **4.3.2 Building a Shared Vision**

Kevin’s efforts to bring safety into the discourse were substantial. In addition to informally talking about safety, he also ensured it was discussed at every employee meeting. A particular type of “All Hands Meetings,” that was new to the organization, soon became a central mechanism used to get the Park’s full time associates together to discuss concerns. Safety was always on the agenda.

Another mechanism used to share and spread the vision was the establishment of an effective and active Safety Committee. Members were carefully selected from every department and throughout the hierarchy who could contribute to its goals. Happy Land ensured that the safety message was assimilated into each work group by doing so. Kevin also made sure they worked productively and focused on accident prevention. To drive the culture and the message that improvement was expected, he asked its members, “What can we do to improve the chance of preventing this incident that you are having in your work area?”

Looking at other ways to drive the safety culture, Kevin thought back to his earlier experience in heavy industry and developed ways to reward safety practices. One of the occupational safety goals was not only to increase compliance with existing rules, but also to reduce injuries by thinking through each job in advance. Full-time associates earned Wal-Mart gift cards of substantial value for remaining injury free each quarter. The program was popular. Another method to instill compliance was to provide choice. Kevin eliminated the punitive nature of enforcement that only served to ensure non-compliance. He eliminated the policy that fined

employees for lost personal protective equipment. Instead, he walked around with safety glasses in his coat pocket and freely handed them out. He established a line item in his budget to replace personal protective equipment each year, thus providing the men with the funds as well as choice to purchase what they needed to work safely.

With so much at stake, Kevin engineered changes to practices, systems, and attitudes—not only to identify and address problems, but also to solve them. With a safety program and department in place, and with visible signs of change, within a matter of just a few months the insurance industry responded; the Park saved hundreds of thousands of dollars in insurance premiums. Those savings Kevin noted proudly “have been sustained year after year.” Others called the change “a complete 180°” turnaround.

### 4.3.3 Sharing the Vision

Building a shared vision took resolve. Sustaining the vision required strong direction and constant effort and communication to fight efforts to subvert or resist it. More than one person needed to be thinking about safety, so Kevin and Ethan, another manager with a background in insurance, formed an Accident Review Committee that reviewed every employee occupational injury. Interestingly its membership was fluid and consisted of the injured person, his or her supervisor, the Safety Director, and at times a member of the Human Resources Department. Ethan commented that these meetings “scare the pudding” out of employees, particularly if the accident was preventable. They instilled a sense of responsibility and accountability. Actions now were perceived to have consequences. Ethan reported that incidents of horseplay were down following the introduction of this safety-alertness sustaining mechanism.

Similar groups reviewed guest accidents. The Park’s Public Relations Director scanned numerous online resources on a daily basis to ensure that the staff was informed via email of amusement industry accidents in a timely manner. While lack of time to read through numerous emails was cited as a barrier for some operational staff, everyone paid particular attention to accidents that occurred in the region, or on rides or attractions that were similar or identical to their own. Looking beyond the local significance of these events, Kevin—who actively participated in networks of independent amusement parks and sat on the state’s amusement ride advisory committee—took a broader interest in how industry accidents occurred. For example, Kevin studied a roller coaster fatality that occurred at Disneyland by reading the Cal/OSHA Report online. What horrified him was the “etiology” of this accident. He realized the factors that contributed to the Disneyland accident could very well arise at his Park. As a consequence he immediately worked to change pertinent practices and procedures at Happy Land. Because he was willing to look beyond the surface features of the Disney accident, Happy Land benefitted from flaws in the operation of another amusement park.

What Kevin discovered in his analysis of this particular accident was that flawed safety systems know no boundaries—they existed in parks both large and small. Using this knowledge, coupled with his opinion that the amusement park industry was at least 10 years behind in safety practices found in heavy industry, he transferred what he knew to develop and further codify additional practices and procedures at Happy Land. Those guidelines were soon discussed, written, and incorporated into the Rides Department’s Standard Operating Procedures Manual. Meg, Kevin, and Paul stated they were assiduously enforced.

Sharing the vision also meant that employees could communicate negative feedback to management without penalty or fear of reprisal. At Happy Land, psychological safety in this non-punitive climate was “understood as expected because it’s like a family here.” Employees in many departments thus met and communicated candidly with their managers and department heads on a regular basis. In addition to discussing general process improvements, the departments were expected to hold open discussion about accident prevention based on specific injury incidents. On a larger scale, All Hands Meetings of the entire staff were another venue for sharing the vision across departments.

Many Happy Land leaders saw that the focus on safety had made a real difference in how all employees approached their daily tasks. Now they “think through the job” in advance and strategize how to do it safely, whereas before they just jumped in.

#### **4.3.4 Taking Time for Reflection**

With a seasonal staff of over 2000, sharing the vision was a constant effort. The seasonal nature of the industry allows time for an automatic cycle of reflection, renewal and change. The winter had its own pace—from envisioning how to correct problems by talking about them in small groups, to engineering proposed solutions by discussing them with ride manufacturers as rides are torn apart and rebuilt, or by attending industry conferences where critical licensing occurs. Happy Land’s managers used this time not only to rest from the exhausting pace of their work, but also to regularly discuss mutual problems across departments. Communication was enhanced because they could just “walk down the hall” to talk informally and bounce ideas off of one another. According to Meg, then, the off-season was when leaders were afforded time to “get to” the larger key operational issues and make sense of them.

The winter was also a time when, by attending industry trade shows, managers could see what was new, reconnect with old friends and share war stories with trusted peers. Attending one of several week-long amusement industry “safety schools” allowed maintenance, operations, and safety personnel to renew their licenses and form bonds with others having like responsibilities. Much was gained in numerous classes offered by the industry to professionalize and harmonize practices. Even more was learned at sessions after hours when information was freely shared by talking with “the right people.” Introductions were made and

business cards exchanged. Maintenance men have always learned through informal networks of those with a vested interest in getting “their rides” working. At the executive level similar sharing occurred through involvement in a group of independent park owners who could discuss privately and confidentially all phases of the operation. Kevin participated in this group along with the owner.

---

## **4.4 Phase Three: Tragedy Strikes Again**

After much progress and with many new systems in place, the second fatality came as quite a shock. It led to a new wave of change in the Park.

### **4.4.1 Framing and Reframing**

This time the fatality was an employee, not a guest. For Ethan, this fatality “really bothered him.” He knew the teenager who was killed—it was his neighbor. This fatality contributed to Ethan’s deep understanding of the work that lay ahead of the Park in terms of its occupational safety program. At this point, the Park had “suffered” two fatalities. The lessons learned pushed the Park further along the path to becoming an organization in which learning and performance were tightly linked.

The managers addressed the occupational accident with as much intensity as they had the first. They sensed the need for someone who could devote all of his or her time to safety, as well as to become a resource upon whom every department could call. A new position of Safety Director was created with full status of department director. This important decision ensured the Safety Director had an equal say in both policy formation and enforcement.

### **4.4.2 Putting New Safety Mechanisms in Place**

Among his many contributions, Karl—the new Safety Director—instituted a Near Miss Reporting System. He supported its use during Employee Orientation and also at All Hands Meetings. The data generated allowed the Park not only to capture lagging indicators, but also to identify leading indicators of hazardous conditions before an accident or damage to equipment occurred. Working with the Safety Committee, Karl investigated each Near Miss Report. As was the case with the Accident Review Committee, preventable incidents were discussed with the person and his or her supervisor. Outcomes were shared with the department manager.

Data from Near Miss Reports and First Aid Reports were captured in a database, and then shared with managers. The Near Miss Report data were also transferred from tabular form to a caricature created by the Safety Committee and affectionately named “Clumsy Cliff.” There was one Clumsy Cliff for each operating year that was displayed in a high traffic area in the Park’s main office. Different colored

stickers were placed on Clumsy Cliff's body parts to indicate types or categories of injuries (e.g., burns were red, cuts were blue), and the number of stickers indicated the frequency of types of injuries. Severity of injury was also captured. Clumsy Cliff allowed people to literally see patterns that might otherwise have been buried in the spreadsheets and reams of paper any database may produce.

The Safety Director and members of the Safety Committee routinely reviewed the data. As an example of a general pattern, the members reviewed current accidents on a regular basis. They worked with visual data as well as spreadsheets and statements from the injured to collectively discern emerging patterns. Then, they huddled with the respective department head, gained access to observe work in progress, and watched how it was actually performed. The members and department heads were often able to develop relatively simple and cost effective solutions to injury producing conditions. This reduced OSHA Recordables and costs associated with Workers' Compensation claims.

In addition to reporting accidents, the Safety Director initiated the use of scenarios, drills, and even vendor demonstrations. Some drills were massive in scope and involved real-life drama using actors, theatrical make-up, helicopters, ambulances, and so forth. These drills were then discussed in post-drill reviews, similar to After Action Reviews. Vendor demonstrations included the "roller coaster guys" who tested out different types of harnesses used in climbing the roller coaster structures. They also watched and participated in demonstrations of "high angle" rescue techniques should someone fall from the structure of a ride. The Maintenance department took this training to heart. As Paul, the Maintenance Director stated, "Now we know that we have the skills to take care of our own" and "we have the confidence to do this" rather than to look up and wonder what they would do.

As many of the leaders stated, safety is about being proactive, not reactive, to changing conditions in the environment. These scenarios and drills served another function, too. They linked the Park to the outside world and to services and people who would be called upon to address disasters. Kevin was a bridge to the regulators. At the time of his interview, he sat on the State's amusement advisory board where he could effect change. By forging these relationships, and by way of the scenarios and drills conducted, many Park personnel improved their understanding, both of the capabilities they had and of the competencies they still needed to foster or develop.

Karl, the Safety Director, provided training and served as an important resource for the other departments. Not encumbered by other duties, he focused on safety alone and delivered results. He had the time to investigate incidents deeply, and to look for patterns. A key benefit was that he managed to keep safety constantly on everyone's mind. He developed in-house training, invited guest speakers, and attended numerous safety seminars hosted by general industry or the amusement industry. He used time at these seminars to learn and link to other safety professionals. The networks he established extended his ability to problem solve

with others who had more expertise. He thus quickly broadened his repertoire of skills.

### **4.4.3 Modeling Safety Behaviors**

Numerous systems and practices were now in place. But had the culture and climate changed? As Kevin and Karl both mentioned, leaders must model expected behaviors and realize that they are constantly watched. Their actions more than words or policy statements signified what was really important. For example, Kevin relayed a story in which he had to remind the Park's owner to return to his office to get a hardhat prior to inspecting a worksite. Pressed for time the owner was exasperated. Kevin told the owner that if he did go to the worksite without his hardhat that he would compromise the entire safety program. The owner reported to the worksite with his hardhat. The owner subsequently realized what showing up without the hardhat might have meant to workers present, and later said, "You just saved two years of building that safety program."

By now the Park as an organization and its leaders had fully committed to advance safety as a cornerstone value. As management collectively looked back at what they had accomplished, they realized that even though much had changed for the better in addressing safety, there was still more to be done.

---

## **4.5 Phase Four: Safety Becomes Personal**

The company underwent a massive reorganization that brought with it another wave of major change. With a Safety Department in place, and a highly functioning Operations Department, Happy Land Amusement Park took another major step when it hired Paul as the Maintenance Director.

### **4.5.1 Reorganizing to Maintain Safety**

The reorganization meant there were now key people who were dedicated to and responsible for each of the three main operational areas: rides (Meg), safety (Karl), and maintenance (Paul). Kevin was in a Director role in charge of safety. The reorganization also divided general management duties and subsumed various functional areas into two large divisions. One division had oversight for administrative operations, including the safety management program. The other division had oversight of all operational functions. In theory and practice, the safety effort was well on its way to becoming a core value due to the intense and pervasive focus placed on it.

The Maintenance Director, Paul, brought with him decades of experience in other process industries that he effectively transferred to the amusement park environment. His impact seemed substantial some 18 months after he was hired.

He was careful, analytical, and deliberate in his communication. When talking about his workers, he commented that he routinely discussed the intention that “the men go home with all of their fingers and toes each day.” Paul also discussed the differences between his prior work in paper mills or steel mills and the amusement industry. He commented, “Here you are moving people” as opposed to paper or steel, “so, it has a different twist to it.” In a later comment, he added the potential for injury “is frightening” and that he felt an “enormous sense of responsibility” for all aspects of operation.

Like the others, Paul was well aware of the organization’s cultural issues that he had been hired to address in addition to advancing his department’s practices. And, like Karl, he noted resistance from established clusters of tenured employees. These sub-groups were accustomed to working in a particular manner; many saw no reason to change what had worked for them. Nonetheless, by recognizing and identifying dangerous or substandard practices, Paul enabled workers to change their mindset. His *modus operandi* was to talk out matters with the men. He was careful to do more listening than talking. He conducted regular meetings to discuss safety and injuries, asking the men how they could prevent injuries that had occurred by working differently. He did this in small department meetings and ensured that he got a response.

Paul had earned the respect of the men despite a few rocky starts and a bit of testing of his ideas. His expertise and knowledge of maintenance practices outside of the amusement industry made a difference. By being out in the field and talking to the men, he created a sense of unity and trust as he challenged assumptions thoughtfully. For example, as a result of these sessions some of the men who work on roller coasters (“the coaster guys”) approached Paul about how they routinely injured their hands. They had come to expect that injuries were simply a part of the job. He asked them how they held their tools. Astonished, he discovered they did not know about a simple “tool holder” that removed their hands from the hammer’s strike zone. Armed with the device, the men soon learned how to build their own. As a result of the use of this simple gadget, those painful injuries were eliminated and Workers’ Compensation claims fell dramatically.

### **4.5.2 Detecting and Correcting Safety Errors**

Paul’s analytical skills were put to the test when a prototype ride was installed. The ride had presented numerous challenges beginning with the relatively simple tasks of learning how to maintain and operate it—tasks that are never straightforward in the first year. However, the new ride presented significant issues when customers learned how to release the restraints and jump off! What’s more, they did so in positions along the course of the lengthy ride never anticipated by the ride manufacturer. This presented an extremely dangerous situation because the ride operators could not see that passengers on the ride had disembarked. In addition, ride operators would assume they could safely go about a normal routine dispatching vehicles that had the potential to injure or kill people standing in “red

zones” or unauthorized areas. Since it turned out to be impossible to design foolproof restraints for this ride, the Park had to install additional decking and handrails for the ride operators—to allow the entire ride path to be seen as well as to initiate practices that would enable staff to safely attend to “stranded” passengers.

As a consequence, Meg, the Ride Operations Director, and Paul spent many hours at the ride. Working with Meg, the maintenance staff, and supported by Ethan and Kevin, collectively the leaders engaged in trial-and-error experiments to come up with solutions to each new challenge. Importantly, once Paul determined some of the fixes were not working, he collaborated with the men to get under the surface of problems to find their root causes. It was gratifying to hear men routinely asking “why?” of situations. This signaled to him that they had grown and learned not to accept the surface features of an accident or incident, but in fact were on the way to detecting and correcting error.

---

## 4.6 Summing Up

Stories usually have a beginning, middle, and an end. The Happy Land Amusement Park story seems to have a continual beginning because the Park learned how to learn. Managers framed accidents as learning opportunities, and purposefully looked for near misses. They also scanned the industry for accidents. To build alignment, the Park took action at multiple levels and codified learning from practice. They made it a point to discuss accidents. Through an active and vibrant Safety Program and Safety Committee, the Park ensured that learning was driven throughout the organization. Workers increasingly found ways to surface and discuss problems.

When faced with the shock of two fatalities, radical change occurred in the organization’s leadership, structure, and culture. The Park looked outside to hire expertise, and it did so very carefully. Outside talent introduced new systems and practices, which transformed the climate and culture—instilling safety as a core value. In addition, because the organization’s leaders were engineers, they brought to bear the logic of their discipline in detecting and correcting error.

The lexicon of engineers highlights a dominant logic not unlike that of organizational learning—capture, share, and use data to improve information and create organizational wisdom. This framework facilitated for the Park’s turnaround. Leaders resisted the notion that accidents can be encapsulated and blamed on victims. Rather, they collectively came to grips with and challenged assumptions that underlaid many practices, procedures, and routines. This case amusement parks in a group of safety-critical industries that rely upon high-reliability of their operations (Weick and Sutcliffe 2007).



## 4.7 System Dynamics: Our Model

The story of Happy Land Amusement Park revolves around the organization's learning and changes put in place over time in response to two fatalities, each of which made it clear that the Park was not "safe" as presumed.

Safety came to the fore, following the first fatality, through debrief meetings and widespread Park discussion to share perceptions and identify what went wrong. A vision began to emerge when Meg, who led the Operations Department, observed unsafe practices and identified new safety behaviors in collaboration with the Maintenance Department.

The new safety vision was shared through changes in other Park systems and practices. New talent (Kevin) brought in new ideas from heavy industry and shared data about accidents and incidents. As did Meg, Kevin made it a point to be out in the Park to talk to employees and listen to their concerns. He analyzed and used data to raise awareness of what needed to change and to rewrite the Safety Program.

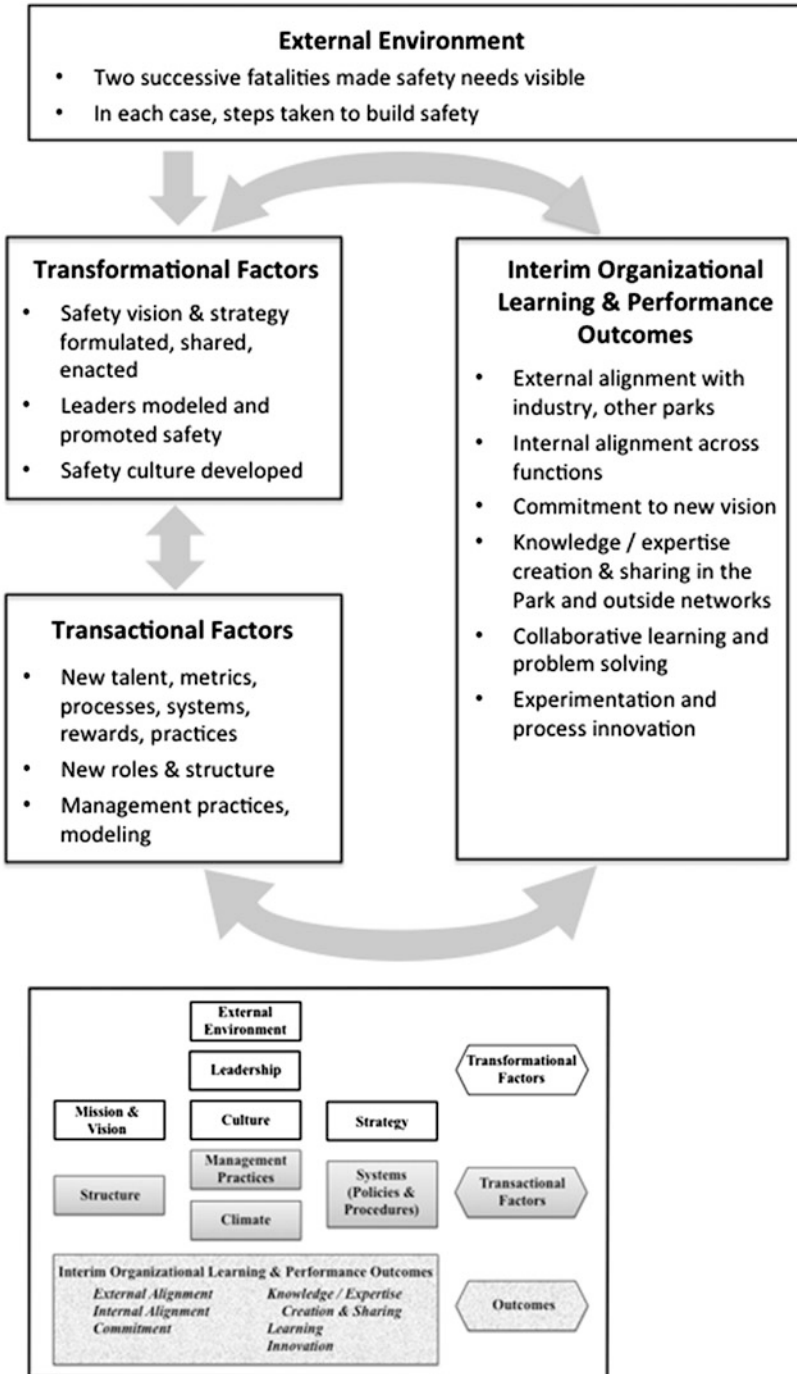
Kevin, often working with others, put many systems and practices in place and fostered sharing of internal and external safety knowledge. Mechanisms that Kevin put in place changed the climate so there was a sense of shared responsibility and accountability growing in the Park. Information and communication systems made expectations transparent and aligned rewards with results. Managers bought in and modeled desired behaviors, increasing psychological safety and monitoring. This, in turn, affected commitment. External scanning and learning from outside the industry and through networks helped leaders innovate their processes and practices in ways to improve safety.

The second fatality demonstrated that the Park could not rest assured that enough had been done. A new departmental position—Safety Director—was created. More new systems and practices were put in place to support conversations and safety problem solving:

- A Near Miss reporting system with data shared on a regular basis and made more visible to all through a centrally located Clumsy Cliff caricature to show patterns that might otherwise be missed in data reports.
- Scenarios, drills and vendor demonstrations discussed in post-drill After Action Reviews.

Perhaps most important was that leaders from the owner down to the front lines were expected to model safety and knew their behavior was monitored and noticed. Management practices and modeling changed the climate and ultimately the Park's culture to put safety first. The capstone was reorganization to maintain safety.

See Fig. 4.1 for a summary of these key transformational and transactional dynamics.



**Fig. 4.1** Key system dynamics in Happy Land Amusement Park case with schematic of our model (Fig. 2.1) included for comparison

---

## References

- Wall, K. H. (2011). Organizational learning from near misses, incidents, accidents, and fatalities: A multiple case study of the USA amusement industry. *Dissertation, Teachers College, Columbia University*, 3492904.
- Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed.). San Francisco: Jossey-Bass.

---

# Leveling Up: How South Side High School Learned to Transform Itself

# 5

Joint Work with Alexander M. Hoffman

---

## 5.1 Overview

Innovation often begins with a new vision. Making sure that an innovative vision takes root involves cycles of experimentation, learning, and knowledge sharing along with changes to behavior, practices, and the organization. Unless learning is leveraged organizationally—and changes made to support desired outcomes—innovation won't become a way of doing business.

This chapter shows how South Side High School (SSHS) in Rockville Centre school district introduced and sustained innovation in order to raise performance for all students, including underperforming minorities. In 1996, 32 % of entering African-American or Hispanic students at SSHS earned the Regents diploma in contrast with 88 % of all White or Asian American students. At SSHS, “just 5 years later, 92 % of all African-American or Hispanic and 98 % of all White or Asian American graduates had earned Regents diplomas” (Burriss et al. 2010, p. 3). The number of minority students graduating in June of 2009 with a Regents diploma further increased to 95 %.

How did SSHS achieve this success? The innovative, controversial strategy they adopted was to set high expectations for all and implement a honors curriculum to achieve that goal. SSHS eliminated tracking students by low or higher performance and instead grouped students heterogeneously, a strategy called *Leveling Up*. This chapter traces SSHS's journey and the role of organizational learning over time in sustaining this innovation.<sup>1</sup>

---

Dr. Alexander M. Hoffman is President, AleDev Research & Consulting. He can be reached at [ahoffman@aledev.com](mailto:ahoffman@aledev.com) or 636-253-3381.

<sup>1</sup>This chapter is based on interviews with Carol Burriss, several guest lectures she delivered at Teachers College, web research, and publications, including Burriss's dissertation (Burriss 2003), Burriss and Garrity (2008), and Burriss et al. (2004, 2006).

### 5.1.1 A Visionary Impetus

Success began with new stretch goals set by the district's superintendent for achievement for *all* students regardless of ethnicity, race or socio-economic status. Superintendent William Johnson had begun to look at achievement and attainment rates by demographic groups in his district, Rockville Centre, at the end of the 1980s. He saw that it was a district of haves and have-nots. Johnson started asking why *all students* couldn't strive for a Regents diploma.

In 1993, Johnson and the Rockville Centre Board of Education set a target by 2000 for 75 % of all graduates to earn a New York State Regents diploma. The rigorous Regents diploma signals a higher level of achievement than less rigorous local diplomas, also offered by SSHS at that time. When this visionary goal was set, the district's overall rate for earning Regents diplomas was 58 %. Additionally, many more White and Asian students earned Regents diplomas than did minority students—reflecting a national school challenge labeled “the achievement gap.”

Superintendent Johnson's questions were echoed by others in his district. As schools worked to increase Regents diploma graduation rates, they saw that a key stumbling block to minority achievement of this goal was mathematics. Minority students did not typically begin first-year algebra until grade 10, which meant that they could not succeed in Regents level math classes.

The middle school (in which Carol Burris had previously taught) decided to detrack math classes prior to actions by SSHS described in this chapter. It thus had revised its math curriculum and taught the revised courses to *all* students in *heterogeneously* grouped classes. To help students succeed, the middle school offered math workshops and provided after-school help. As a result of math acceleration in the middle school, over 90 % of incoming freshmen in the 1998 cohort entered high school having passed the first Regents math exam. These students were thus prepared for rigorous math classes at SSHS.

### 5.1.2 Need to Change

High-profile racial tensions at SSHS further paved the way for change. In the early 1990s, SSHS experienced a 2-week long series of incidents that brought racial tension to everyone's attention. The school tried to address the issue with frequently used responses (e.g., guest speakers on tolerance, adding more multi-cultural elements to the curriculum). However, when he looked closely at what had happened, Principal Calitri noticed that all of these incidents began in the low track classes—where behavior management was emphasized more than high-quality instruction. These classes could be described as anti-intellectual and non-college oriented. Results were sub-par, and were affecting the climate throughout the rest of the school. Addressing these low track classes, therefore, became a top priority.

SSHS's principal—building on the aftermath of racial tensions and success with the middle school's accelerated math curriculum—catalyzed school-wide innovation by eliminating tracking. SSHS committed to *Leveling Up*—beginning

with the 1999 cohort and grouped all students heterogeneously and taught them all using new rigorous curricula. SSHS's principal, summarizing results following these changes, said: "accelerating learning, rather than remediation, is the best method of improving the achievement of struggling, at-risk learners" (Burriss 2003, p. 129)

---

## 5.2 The Context: Rockville Centre and Tracking

SSHS is located in the Rockville Centre School District, in the Nassau County suburbs of New York City. The school enrolls over 1000 students. Most students are White, but there are notable minority populations. At the time of this initiative, 20 % of all students at SSHS were African American or Hispanic, and 13 % of all students received free or reduced-price lunch (FRPL). Minority students were over-represented among the lower socio-economic (SES) groups; 98 % of students in Rockville Centre who qualified for FRPL were African-American or Latino. Although poverty and race are often closely linked, over a third of the minority students came from families whose incomes exceeded the FRPL threshold (i.e., 175 % of the poverty line).

The District has one high school (grades 9–12) and one middle/junior high school (grades 6–8). While far from being the richest district in the state, it is considered to have strong resources available, relative to its needs. It has a good student-teacher ratio, one in line with those of other similar districts.

As in most school districts in this country, Rockville Centre's schools used to have a variety of tracks.<sup>2</sup> At SSHS, students *could* take classes from other tracks, but there were many reasons why they did not. The top classes were reserved for the top students, with many barriers to keep others out.<sup>3</sup>

In the 1980s and 1990s, SSHS offered both local and Regents diploma options, as well as Advanced Placement (AP) courses and the International Baccalaureate (IB) program. The IB program is a curriculum and set of exams established by the International Baccalaureate Organization in Switzerland ([www.ibo.org](http://www.ibo.org)). As is the

---

<sup>2</sup>In the 1980s and 1990s, there were at least three tracks in most high schools in New York State. The State's Board of Regents (i.e., the State's school board) set rigorous requirements for a Regents diploma, but allowed districts to award local diplomas that met other requirements. "Beginning with students who enter ninth grade in 2001, all New York students must pass Regents exams in English, math, global and United States history, and science to receive a high school diploma"—in effect making the Regents diploma the State's only high school diploma in 2005. New York state requirements adopted in 1997 enabled students to receive "advanced designation on their Regents diploma by taking two credits more than the required 18.5 core credits and by passing additional Regents exams in math, science, and foreign language" (Retrieved 02/15/09 from <http://www.cga.ct.gov/ps99/rpt/olr/html/99-r-0194.htm>).

<sup>3</sup>In some systems, tracks are rigidly defined, that is, each student is assigned to a particular track, and can only take classes on that track. More commonly, however, students may take classes from any track, but they tend to take the vast majority of their classes from a single track, and many students take *all* of their classes from a single track.

case for the AP program, IB is intentionally challenging. In 1988, only 20 % of the seniors at SSSH had taken one IB course, only nine had completed all of the IB courses, and only five passed all the IB exams.

---

## **5.3 Raising Expectations: Increasing the Regents Diploma Rate**

### **5.3.1 Getting Started**

SSHS leaders realized that, if they were going to dramatically increase the school's Regents diploma rate, they would have to understand what happened to students along the way that kept them from graduating with a Regents diploma. White and Asian students graduated at a very high rate, usually with the more prestigious diploma, but not all of them did so. Latino and African-American students graduated at a much lower rate, but some were earning Regents diplomas.

School leaders engaged in a cohort analysis. They had the old records and transcripts of previous cohorts, both of students who earned the Regents diploma and those who did not. They mined these data to find markers that students were at risk of not completing all Regents requirements. In addition to looking at demographic factors, this retrospective analysis included examining students' attendance in their classes, their grades, as well as courses they dropped or switched.

The cohort analysis project served two purposes. First, it showed school leaders where to look in order to best target their efforts, helping students before they fell too far behind or between the cracks. Just as important, however, it helped the school leaders to bring others on board. An ongoing challenge, as South Side High School changed the way it did business, was to change people's expectations—not just about what was preferable, but also about what was possible. With this analysis, they were able to show skeptics that students from the poorer neighborhoods *could and did* earn Regents diplomas, regardless of socioeconomic status (SES), ethnicity, race or family background. They could point to specific barriers, hurdles and markers showing that the school had failed to help its students. Not everyone was convinced, but the effort had begun.

### **5.3.2 Guidance Counselors Were Key**

SSHS's guidance counselors were charged with responsibility for keeping track of more than 1000 students' progress towards their Regents diplomas—which included both successfully completing the required classes and passing a battery of eight end-of-course Regents exams. The school's leadership knew that, for the school to reach its goals for these students, the work of these guidance counselors was critical. Their expectations for many students would have to change.

Assistant Principal Carol Burris began meeting with the counselors—not simply to hear about the school’s progress as a whole, but as well, to discuss individual students’ progress. She described these meetings as follows:

These were not meetings they liked. . .sitting there on the hot seat and you have to justify why that child didn’t take the test again, why they’re not going for extra help, it really motivates people to pay attention to those kids that are sort of on the fringe, that could go either way.

Burris considered it an important part of her responsibilities to increase counselors’ awareness of students who were struggling. She pushed them to stay on top of these students. For example, she wanted them to find out if students were going for extra help offered before school.

Burris realized that not all of the counselors were fully on board with the school’s goals, and pressed them to commit to high expectations for all students. At that time, students who fell short of Regents diplomas could still earn a local diploma, and some counselors were content with that. In one instance, Assistant Principal Burris discovered that a student was on pace for a local diploma, but that he could get a Regents diploma if he just took a single art class. Burris described this as follows:

This is like so easy, this isn’t even passing an exam.’ And I said to the counselor at the time, I said, ‘why not?’ And his response was, ‘Well, his father’s in refrigeration. What does he need a Regents diploma for?’ That really spoke volumes. And I took matters into my own hands. I went and I spoke with his mother who was, she started to cry when I told her that her son, if he took this one course, would be able to earn a Regents diploma. It really meant something to her significant. And, gradually, what happened was that counselor came on board over time when he realized—you know I wasn’t going to let him off the hook when a kid didn’t get a diploma.

In fact, one day 4 years later, this same counselor told Burris that over the weekend, he had been bragging about how high the Regents diploma rate was at SSHS to friends who worked in the school district in which he lived.

### **5.3.3 Structural Changes**

Moving all students up to a Regents level curriculum meant that the school needed to provide additional support for struggling students. For example, the school offered extra help for students after school, 4 days a week. This was formalized when the teachers’ union contract expired. The District and union agreed that after-school support would be part of the next contract. They also agreed that teachers’ work would no longer include administrative duties. (Many districts require teachers to spend one period a day on some responsibility in addition to classes). For example, instead of tracking down students who missed class to find out whether they were skipping or were absent for some other reason, teachers’ duties would involve



academic support (i.e., “Resource Duty”). This allowed struggling students to attend extra sessions for reading, writing and/or math support every other day.

The high school also began to coordinate teachers’ schedules so that more of them could have common planning periods, both by department and by interdisciplinary cluster. This made it far easier for them to coordinate students’ deadlines, so that they would not have too many tests on the same day, or big projects due at the same time.

These changes required a different view of the school’s master schedule than had existed in the past. Scheduling the classes of nearly 100 teachers and over 1000 students had never been an easy thing, and can be very time consuming. It is almost impossible to create a schedule guaranteeing that no student is limited by conflicts that prevent him/her from taking all the classes s/he wants. SSHS leaders made priorities clear, and demanded more of those who crafted the schedule. As Burris explained, “We just kept working the master schedule until we made sure that every child had all of the support classes that they needed in order to be successful.”

SSHS also created a Risk Team, made up of administrators, guidance counselors, school psychologists and social workers, and the school nurse. They met together twice a month to review the cases of the most at-risk students, student by student. They reviewed both in-school and out-of-school issues, coming up with an action plan for each student—including whether or not there was a need for court involvement—that was the responsibility of the appropriate guidance counselor to oversee.

All of these changes were designed to change the relationship and responsibilities between the school and its students. In the past, the school provided resources and assistance that students could draw upon. Now, the school did everything it could to bring help and support to the students. Some of these changes, like much of the after-school help, required the District to find additional money for support. Bringing this kind of help to students became the priority, so the funds were found.

### **5.3.4 Heterogeneous Classes**

*Leveling Up* meant more than just raising expectations and supplying extra help. If all students were expected to earn Regents diplomas, there would no longer be a need for lower tracks. School leaders sent a strong message to students, staff and faculty alike by eliminating sub-Regents courses. In the mid-1990s, South Side High School consolidated to a single track for 9th grade English, Social Studies and Foreign Language in 1 year, and a single track for 9th grade Science in the next year. At the same time, the school reduced barriers that prevented students of all grades from signing up for the higher of the two math tracks by no longer requiring test scores or teacher recommendations to take classes above Regents.

Assistant Principal Burris was intimately involved with all these changes. For example, she paid special attention to ensuring that single-track classes truly were heterogeneous. She made sure that high-achieving kids were not clustered in certain classes, or low-SES students clustered in others. She reviewed the rosters of every class to ensure that each one had a mix of students that was representative of the

student body. Informal or under-the-radar tracking would thus *not* recreate the old formal tracking system. She also continued to pay close attention through the year to changes in class composition. She had to sign off on every course dropped by any student, a duty that she did not treat as mere paperwork. It became an opportunity to examine data that reflected what was going on in individual classes. She kept her eyes open for teachers who might be encouraging students to drop down to easier classes, even after the guidance counselors had worked so hard to get them to enroll in the more rigorous classes.

When she discovered that virtually all the students dropping a math course came from just one of the two teachers who taught it, Burris took action. She spoke to the teacher, and had the other teacher help him to change his approach in class. The goal was to push students to higher-level coursework, and she was not going to allow teachers to discourage students from doing so.

### 5.3.5 Beating the Goal

Burris remained vigilant about preserving the heterogeneous grouping in classes and high expectations for students, and limiting any sort of tracking. The school's efforts have proved successful. For example, in 1 year the White/Asian passing rate on the Biology Regents exam went up from 85 to 94 %, while the Latino/African-American rate went up from 48 to 78 %. Even while the White/Asian rate was climbing, the racial gap shrank dramatically, from nearly 40 percentage points to less than 20. But school leaders were not content with those gains.

---

## 5.4 Greater Expectations: Expanding the IB Program

Raising the overall Regents diploma rate by bringing the White/Asian rate close to 100 % and cutting the racial achievement gap with African-Americans and Latinos by more than 2/3 was a significant achievement. But *Leveling Up* aimed at bringing all students up to the highest possible standard. The gold standard for high achievement levels is the challenging International Baccalaureate (IB) Diploma. Highly regarded worldwide, the IB focuses on “preparing students for success in higher education and life in a global society” ([www.ibo.org](http://www.ibo.org)). SSHS adopted a goal of expanded enrollment in IB classes, made possible in part because the elementary and junior high schools in Rockville Centre had also worked on *Leveling Up*. As students who had never been tracked started to fill the high school, South Side could push them even further. However, this required further changes to the culture of the school.

### 5.4.1 Bringing Students on Board

Expanded enrollment in IB classes—taken in 11th and 12th grades—was a result of the general *Leveling Up* approach taken by the District as well as particular efforts to push kids into these classes. Counselors encouraged any student who signed up for even one IB class to take additional classes, and they especially pushed Latino students to sign up for IB Spanish classes. When the school realized that many talented African-American art students were not taking IB Art, the school's own prerequisites for the class were relaxed. All 10th graders had a 45 minute meeting with a counselor who showed them that they would not have to take any additional classes or take any classes early to fulfill IB's course requirements. Eventually, the *Leveling Up* process reduced the 9th and 10th grades to a single track across the board, and *all* students were enrolled in a demanding pre-IB curriculum in 10th grade. With all students prepared to take these rigorous courses, the IB classes were opened up to any student who was willing to enroll.

SSHS also made an unusual offer to students to encourage them to try out the more demanding IB classes. They were promised that if they enrolled in an IB course, but found that it was too much for them, they could drop down to a Regents level class and they would get a 10 % bonus on all of their transferred grades. So, if a student had been getting an 80 % in his/her IB class, s/he could transfer to a Regents class with an 88 % (i.e., 80 + 8) average. Students, therefore, had little to lose by giving IB a chance.

Principal Burris reviewed the class rosters before the school year to ensure that each of the IB classes was heterogeneous by prior achievement. She did not want elite IB classes and regular IB classes. To help minority students, she made sure that they were clustered in classes together, so that none of them were the sole representative of their race or ethnicity in the room. Through all of these efforts, the schools' leaders and guidance counselors continued to push more and more students to aim higher. The school turned IB into a mainstream option for every student. However, this could not have succeeded without changing teachers' views and practices.

### 5.4.2 Changing How Teachers Teach

Most of the professionals in a school are classroom teachers, and they obviously do the core work of schools. SSHS had changed what classes they could teach by eliminating the old low track courses. It had changed who was enrolled in classes, and the kinds of support that teachers offered outside of their regular classes. Changing what they did *during* those classes would be the greatest challenge. Principal Calitri and his successor, Principal Burris, understood that they would have to work hard with teachers if *Leveling Up* was going to succeed.

### 5.4.2.1 Sharing Data and Results with Teachers

From the beginning, school leaders knew that they would have to convince teachers that more students could handle high level work. Back when SSHS began its cohort analysis, the data and the results were shared with teachers to show them that students from every demographic group and cross section *could* succeed.

This process of examining data and sharing results has continued. For example, data were used in 1999 to convince math teachers that a revolutionary math reform was working, even though teachers feared that it was not. In the mid-1990s, the local middle/junior high school began to enroll *every* student in the highest level math course sequence, a program that had previously been reserved for the top 20 % of students. When the first cohort to complete this program reached the high school, their math performance was lower than that of the previous cohort. But when school leaders looked at the data, they realized—and showed teachers—that this ambitious *Leveling Up* program in math actually yielded *better* results than previous, less ambitious programs in other subject areas.

Principal Burris explained how critical this was:

We always shared data with teachers, which we felt was really important. Because, even if they're sort of a non-believer in what we were doing with de-tracking, when the data's there and it's clear data, it's really hard to dispute it and you have to at least at some level suspend some of your disbelief.

School leaders at SSHS went out of their way to publicize the accomplishments of teachers within the school. They recognized teachers who made strides with struggling students in addition to teachers who worked with top students.

### 5.4.2.2 Getting Data from Teachers

SSHS leaders expanded the types of data that they reviewed. They did not limit themselves to standardized test scores, end-of-course grades, the usual demographic background factors and occasional classroom observations. They looked at grades as they came in through the year, enrollment patterns (e.g., examining drop slips), and attendance patterns. They used standardized test data in a sophisticated manner, trying to “control for prior achievement,” (Burris and Welner 2005), meaning that they broke down their analysis to look at students who had previously done well, done poorly or performed in the middle, so that they could make sure that no group was missing out on the district's overall improvements. The goal of *Leveling Up* was to increase achievement of low-performing students while also increasing the performance of mid- and high-achieving students.

SSHS did not stop there, however. They did not just want to see measures of output, but also wanted to look at the processes that led to those results. They looked at examples of student work, as well as many different kinds of data for teacher work, such as teachers' lesson plans and the kinds of questions that teachers asked in class. These data could show whether teachers were pushing students to think about complex problems and examine the process of getting to an answer, as opposed to asking simpler factual recall questions.

### 5.4.2.3 Developing Teachers I

SSHS knew that the changes it was putting in place would require fundamental changes in teachers' approaches. Experienced teachers would have to unlearn old ways of doing things and of thinking about students. New teachers would have to develop their own practices in an environment likely quite different from that of the schools they had attended, one where teachers were expected to teach classes with a wide range of students in them while enabling all to thrive. This kind of change—this kind of growth—would take time and support.

Scheduling common planning periods for teachers was part of the solution. With this time together, teachers could help each other with challenges as they planned units and lessons. They could better coordinate students' assignments so that major projects could be spread out, rather than come due at the same time. Together, the IB teachers realized that they could assign key excerpts from some history texts, rather than requiring students to read the whole work.”

The leadership team also collaborated in order to help the faculty develop. For example, the administrators responsible for observing and evaluating teachers ate lunch together on a weekly basis. At these luncheons, they reviewed every teacher they had seen during the previous week to go over their strengths and weaknesses. They concentrated on making sure that they, the administrators, gave the same message to everyone, both in areas of focus for the school and expectations for performance. They made sure that, together, they provided their teachers with all the supports that they needed to succeed.

### 5.4.2.4 Developing Teachers II

As school leaders recognized the need for more differentiated instruction, they were not able to identify existing professional development programs that met their needs. So they worked with the teachers to develop their own program.

Principal Burris looked for productive leaders on her faculty, and for teachers who were already engaging in the sorts of practices that she wanted in every classroom. She expected that these teacher leaders would better understand what SSHS needed, and be able to help other teachers adopt these approaches. Without giving them supervisory responsibility, she could recognize her teacher leaders as true leaders in the building.

The administrators and teacher leaders wanted to help teachers to do things differently for different students, depending on their individual needs as learners. Teacher leaders rolled out their locally developed program to the entire faculty, and continued to teach it to new teachers as they joined SSHS. Teachers would work together to break down models of differentiated instruction so that they could better understand it, and together write new lesson plans that used the same principles.

More recently, SSHS has also rolled out a “Lesson Study” model of professional development. Lesson study, a process developed in Japan and adopted by some schools in the United States, involves teachers in collaborative work to improve,

teach, assess, and modify a common lesson plan that they all use in their teaching.<sup>4</sup> At SSHS, groups of teachers in the same subject area developed a differentiated instruction lesson together, and watched one member teach it to his/her class. They then met to revise the lesson so that they could observe another member of the group teaching the modified version the next day. After a few weeks, this process was repeated again with a new lesson. The school's leaders developed rubrics and guides to help these groups know what to look for in their lessons and to be able to discuss them. Because these were new lessons and a new process, administrators used observations for feedback and improvement, not for evaluation. Administrators only watched the lessons if the group invited them to do so. Principal Burris was particularly proud of this program: "People tend to hesitate about going into somebody else's classroom. So, the fact that we're at a place where people want to do that I think is very positive."

#### 5.4.2.5 Maintaining the Faculty

SSHS has done well with developing its faculty and changing the way they work. It has been an ongoing process. There is always some amount of turnover, and in some years it has been quite high. The district has seen clusters of retiring teachers and clusters of teachers leaving to have children, both common occurrences for schools everywhere. One year, for example, SSHS had 30 new teachers, and 44 % of faculty had less than 3 years of experience. The administrators and teacher leaders, therefore, have had to continue to work hard to maintain the progress that the faculty has made, even while they are pushing for further improvement.

Not every teacher has gotten on board or been able to change his or her approach in the classroom. The school knows that change is not easy. SSHS gives teachers a full year, and often a second year, to develop their pedagogy. However, SSHS has also let go teachers who have shown that they are unwilling or unable to change. "The hardest part is changing pedagogy at the classroom level. But it has to be done," explained Principal Burris. Maintaining an excellent corps of teachers has included removing some, as well.

School leaders look for indicators that a teacher is not right for SSHS. They look for bimodal scores, where some students do *very* well and other students do *very* poorly, without many in the middle. They look at teachers' lesson plans for a variety of pedagogical skills, to make sure that they are not simply teaching the same way every day and only reaching the group of students suited to that one approach. They listen to counselors, who are following the progress of individual students all the time, and perhaps hearing from students about teachers' practices. And administrators listen to what the teacher leaders have to say about their colleagues.

Dedication to *Leveling Up* has allowed SSHS to make amazing progress. But not every teacher understands this. Principal Burris recalled one particular teacher who did not.

---

<sup>4</sup> For more information on lesson study, see <http://www.tc.edu/lessonstudy/lessonstudy.html>

I had one young teacher—she’s long since gone—she had a bunch of kids. And she was a great teacher and she loved her English Honors class. And we got rid of English Honors. About two years later, she came into my office. I was writing something and she said, “You know, I have these bright kids. What do you think about maybe having a little Honors section?” And I didn’t even raise my head. “You know what,” I said, “You better pray that I have a heart attack.” And she said “What?” I said, “Pray that I have a heart attack, because that’s the only thing that’s going to bring Honors back.” After a while, people give up. You wear them down. You wear them down. And I think they know that I’m very committed to the school and I don’t intend to go anywhere. So, if kids are struggling, we’ll acknowledge that. We’ll come up with solutions. But the solutions can’t be a low track class or a high track class.

Eventually, this teacher realized that this was not the school for her, and found another position in another district.

### 5.4.3 Sharing Data Outside the School

SSHS leaders have made a habit of sharing data and results. They have done it internally and have done it externally. The school publicizes data and results as much as it can. Burris includes them in her newsletters to parents, talks about them at school board meetings and uses them at PTA meetings.

The changes that SSHS leaders have made have led to pushback from parents, who of course want only the best for their children. Burris described:

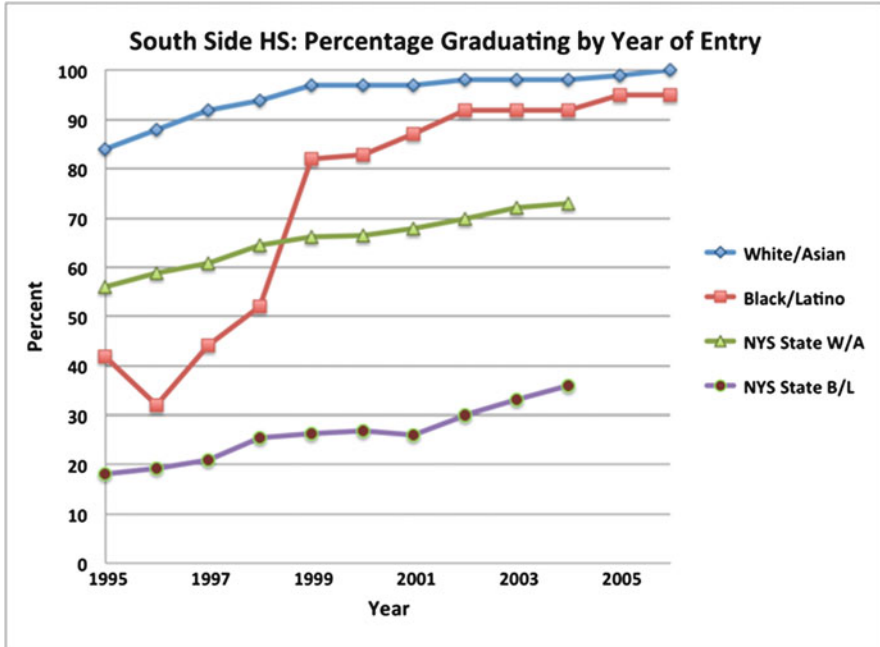
We still get [pressure] from parents, powerful special education parents who think that everything is too hard. And I just got a phone call from a mom yesterday, kept me on the phone for half an hour, saying that she didn’t like what I was doing with chemistry, because there were kids who were going to slow her kid down.

Principal Burris has been consistent in how she deals with pushback from parents. She continued: “You just have to keep sharing data, respectfully listening to people. Telling them, look, give me feedback. If you feel that things are getting watered down, we’ll deal with that.”

When interviewed, Burris described one meeting in which the detracked curriculum was a target of criticism. She displayed a graph that showed a large jump in 1999 in graduation rates for Black/Latino students at SSHS, when compared to New York State averages (see Fig. 5.1). A parent asked what happened in 1999—what caused the large jump. Principal Burris responded that 1999 was when they began 9th grade detracking. “And you could hear a pin drop.” By sharing data, she was able to convince others that this *Leveling Up* was working.

### 5.4.4 Attaining Even More Success

As South Side High School’s Regents diploma rate came close to 100 % for every ethnic group, it ceased to be a meaningful measure of the school’s progress. The school had hit the ceiling of what these data could tell them. Student participation and success in the IB program became a better measure. In 1988, before *Leveling*



Class Size	199	199	199	199	199	200	200	200	200	200	200	200
Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
White/Asian	84	88	92	94	97	97	97	98	98	98	99	100
Black/Latino	42	32	44	52	82	83	87	92	92	92	95	95
NYS State W/A	56	58.7	60.7	64.4	66.3	66.6	68	70	72	73		
NYS State B/L	18	19.3	21	25.5	26.4	27	26	30	33	36		

**Fig. 5.1** Graduation rates by entry year and ethnicity, south side high school and New York state average, 1995–2006

*Up* began, only nine students even tried to complete all the IB requirements and only five were successful. In 1998, 49 students tried and 43 were successful. In 2010, these numbers reached 124 students who tried and 85 who were successful. Many more students completed some of the IB and AP curriculum so that they earned college credit, even if they didn't attempt the entire program.

With the lowest tracks long since eliminated, and well over half of each cohort taking college-level classes while still at SSSHS, *Leveling Up* has done wonders for the kinds of students who used to be low or average achievers. High achievers are also doing better than ever before. Controlling for prior achievement, the school looked at how the top 10% and the 20% had done on the two most widely taken IB exams, English and Math. Scores for both groups had gone up on both exams, while more than half of their cohort had enrolled in each course. Thus, South Side High School had successfully raised the bar for all of its students, increasing achievement and attainment for every subgroup.



## 5.5 Summing Up

SSHS has been highly successful. No one in the class of 2002 was denied a diploma for failing to fulfill the math requirements. That graduating class had a 0 % drop out rate. *Newsweek* ranked South Side High School as one of the top 100 public high schools in the country from 2003–2011.<sup>5</sup> In 2012, U.S. News & World Report awarded SSHS a gold medal, with a national rank of #22 and a State rank of #2. More students took A.P. and I.B. courses.

SSHS achieved these outcomes while expanding minority participation in Advanced Placement and International Baccalaureate classes, and increasing the achievement of its top students. The 40 % + gap between White and minority students in earning Regents diplomas dropped to only slightly over 10 percentage points, even as the rate for White students increased.

The *Leveling Up* program has been transforming SSHS for twenty plus years. The leadership of the school, especially that of Dr. Carol Burris, has followed a consistent strategy as it has rolled out this reform and changed the nature of the high school. The program is as interesting, from an organizational learning perspective, as it is from a school reform perspective. Understanding what SSHS did—and *how* its leaders and faculty accomplished it—illustrates many aspects of the *Strategic Leverage through Learning*<sup>©</sup> model that frames this book.

Throughout the process, school leaders have looked for and made use of many kinds of data, some of which came from unusual sources. Leaders used data to figure out what they needed to do, to convince doubters that it was possible and to provide indicators of the school's successes. Some information was used to understand and refine processes, while other data were used as markers of their results. Moreover, when most students earned Regents diplomas, the school adopted the IB curriculum and degree.

From the beginning, school leaders engaged others in important conversations. They constantly shared what they were looking for, what they were seeing and what was most important to them. They served as a model for the widening of conversations throughout the school. Teachers spoke to one another about the core of their work. Various groups of professionals (e.g., teachers, guidance counselors, administrators, social workers) met together to speak about individual students. (These conversations do not happen frequently in many schools, as everyone is extraordinarily busy, and quite often the schedule prevents them from even meeting together.) Conversations included parents, inviting them into the process of South Side's transformation.

School leaders appreciated that they were driving fundamental change in how their school approached its mission of educating its students. This was never going

---

<sup>5</sup> Retrieved 02/15/09 from <http://www.newsweek.com/id/39380?q=2008/rank/1/>; <http://www.lee-high-alumni.org/best-schools.htm>; <http://www.myshortpencil.com/schooltalk/messages/2/3337.html>; and <http://web.archive.org/web/20060724215822/http://rockville.ny.schoolwebpages.com/education/school/school.php?sectionid=8>

to be easy for the school or for individual teachers. Leaders gave the school time to change, and gave teachers time as well. They respected the learning process that this change called for, and provided support for the staff's development, including time to learn and implement new ideas. However, leaders also expected progress and results. They kept their eyes on their goals, sought to recognize when learning was not occurring, and reacted appropriately.

Some might argue that the detracked curriculum was the single change that had the biggest impact, but this would wrongly view structural change as the critical factor. Detracking was, in fact, the core of the *Leveling Up* reform, but it has been *more a result of South Side's efforts than the cause*. Detracking precipitated change, but organizational learning drove and sustained innovation aimed at success for all students, regardless of family origin. Smaller structural changes (e.g., offering extra help sessions, changing the master schedule) contributed to the process; it was the combined efforts to adapt and change the climate, culture, expectations and even technical know-how that made detracking possible.

---

## 5.6 System Dynamics

The story told in this chapter involves leveling up in two phases: (a) first, by increasing the Regents Diploma rate, and based on those successes, (b) by subsequently expanding the International Baccalaureate (IB) program. Transformational factors in our model were central to initiating and sustaining both phases:

- Setting a compelling vision, and engaging commitment of all stakeholders to it
- Hands-on leadership that modeled, initiated, supported and rewarded behavior consistent with the new vision
- A learning approach to implementing the new strategy of leveling up

Both phases were supported by changes at the transactional level: e.g., new or modified structures, systems and processes, management practices, and changes in the climate.

External and internal environmental analysis helped leaders recognize the need for change. The district superintendent saw that district achievement and attainment rates varied by demographic groups, and asked why *everyone could not* seek a Regents Diploma. He set a challenging goal for the district—increase in the Regents diploma rate to 75 % by 2000. Moreover, a 2-week series of racial tension incidents in early 1990s increased awareness of the need for change. Usual responses, which were tried, did not work.

The superintendent saw that tension originated in sub-par, low-track classes. SSHS engaged in analysis of previous cohorts using a rich mix of data. SSHS set a vision for high achievement for all while narrowing the achievement gap. This included a high track curriculum (no sub-Regents courses) with heterogeneous grouping, differentiated instruction, non-remedial academic supports for all,

services for at-risk students, and expansion of the IB program. SSHS wanted to do everything it could to help all students meet high expectations.

Leaders drove change through data-based decision making. They examined, and changed, instructional processes and academic supports that could influence results. Examples include:

- Meetings with counselors to discuss/advance individual students' progress
- Sharing data with teachers to guide instruction, improve progress of individual students, and demonstrate results
- Sharing data with parents and community to reduce resistance and get buy in

Structural changes were made, for example:

- The District and union agreed to include after-school support in the next contract and eliminate administrative duties for teachers.
- Schedules were coordinated to enable common planning periods.
- A Risk Team was put in place—consisting of administrators, guidance counselors, school psychologists, social workers and the school nurse—that met bimonthly to review at-risk student cases.

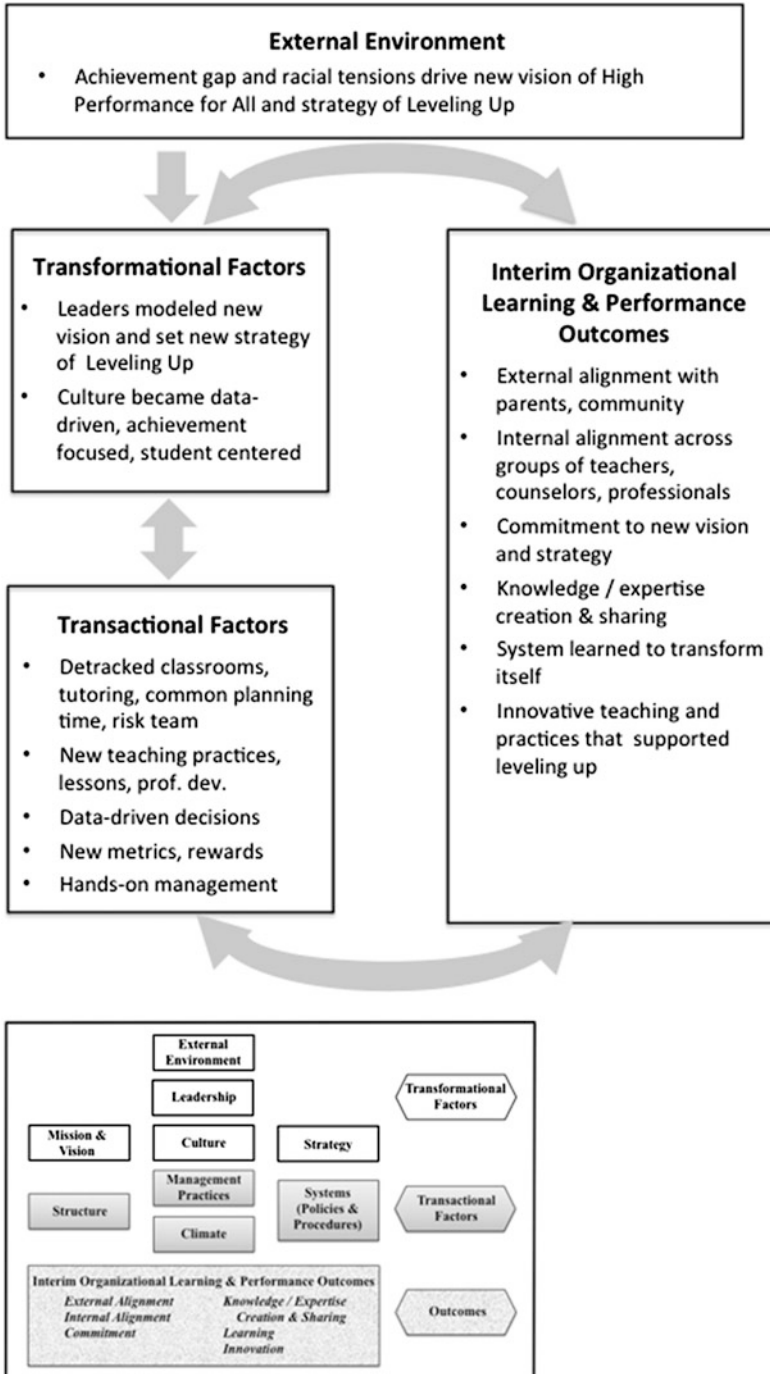
Burris, who was then Assistant Principal, changed management practices to ensure that single-track classes were heterogeneous. For example, she reviewed rosters, paid close attention to class composition and drop-course patterns by course, and worked with teachers where heterogeneous grouping was threatened.

As Regents rates rose, SSHS adopted a goal of expanded enrollment in IB classes. This required new levels of buy-in by students and parents, as well as teachers and support professionals. Counselors were again enlisted. IB classes were opened to anyone wishing to enroll. Policies were changed so that students who found IB too difficult for them could drop down to a Regents class and get a 10 % bonus on all transferred grades. Burris continued to review rosters and pay close attention to class composition to ensure IB classes were heterogeneous.

The shift to making IB mainstream required changing teachers' views and practices. Once again, Burris began with examining data and sharing results to gain buy in from teachers and other school professionals. SSHS expanded the types of data reviewed to examine processes that led to results as well as measures of output, i.e., examples of student work, teachers' lesson plans and the kinds of questions teachers asked in class.

Armed with data, teachers were helped to learn new ways to teach. IB teachers used common planning periods to work out new units and coordinate students' assignments. Teacher leaders were identified and invited to develop and roll out a professional development program based on their own successful practices and improve common lesson plans.

Structural changes, management practices, and communication and information systems changed the climate in the school, and ultimately, through continuing reinforcement began to change the culture. The climate shaped behavior through



**Fig. 5.2** Key system dynamics in SSSH case with schematic of our model (Fig. 2.1) included for comparison

observation, feedback, and attention to changes in instruction; as well as recognition and rewards. Teachers were let go who could not buy in to the strategy after a few years of trial-and-error.

See Fig. 5.2 for a summary of key system dynamics prevalent in the SSHS case.

---

## References

- Burris, C.C. (2003). Providing accelerated mathematics to heterogeneously grouped middle school students: The longitudinal effects on students of differing initial achievement levels. *Dissertation, Teachers College, Columbia University*, 3091233.
- Burris, C. C., & Garrity, D. T. (2008). *Detracking for excellence and equity*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Burris, C. C., Heubert, J. P., & Levin, H. M. (2004). Math acceleration for all. *Educational Leadership*, 61(5), 68–71.
- Burris, C. C., Heubert, J., & Levin, H. (2006). Accelerating mathematics achievement using heterogeneous grouping. *American Educational Research Journal*, 43(1), 103–134.
- Burris, C. D., & Welner, K. G. (2005, April). Closing the achievement gap by detracking. *Phi Delta Kappan*, pp. 594–598.
- Burris, C. C., Welner, K. G., & Bezoza, J. W. (2010). Universal access to quality education: Research and recommendations for the elimination of curricular stratification. *Poverty and Race*, 19(1), 3.

---

## 6.1 Overview

Ericsson's stated vision is "a Networked Society, where every person and every industry is empowered to reach their full potential." Its mission is to "lead transformation through mobility. . . . Transformation is the way we consume and the we create" ([www.Ericsson.com](http://www.Ericsson.com)). Founded in 1876, Ericsson is a leading provider of network infrastructure, managed global services and support solutions. Its "two core businesses are 'Radio, Core and Transmission' and 'Telecom Services'" (Ericsson 2014).

This chapter describes how Ericsson turned its business around by refocusing on strategy and its implementation. Ericsson had been a leader in innovative technology in telecommunications for many years. But in the late 1990s, the telecommunications industry went through major shifts in the wake of an economic downturn, global competition, technology changes, and new consumer demands. Ericsson's business was severely impacted, as was its shareholder value. About the same time, Ericsson also went through several changes in its top leadership. The company chose to transform itself as an organization to regain a leadership position in the industry.

A key step was refocusing its strategy. Innovation in technology—always a strong suit—remained important. But Ericsson had gotten ahead of the market with key offerings. So new leaders coupled innovation with attention to consumer preferences and with ways to achieve operational excellence. To accomplish these goals, Ericsson reduced its workforce by about half, streamlined its operations, and outsourced operations that were not its core competence.

This chapter focuses on Ericsson as it "turned the corner" in 2003–2004 by refocusing its strategy to achieve its vision. The company subsequently weathered the 2008 global economic crisis and is a strong performer today. Ericsson has grown a diverse base of customers spread over 180 countries. It is a market leader in both mobile infrastructure and telecom services (Ericsson 2014).

The spotlight in this chapter is on how a common model, language, and set of tools for strategy development, embedded in a new executive education program, drove organizational learning and developed leaders and networks who could better implement the company's new strategy.

---

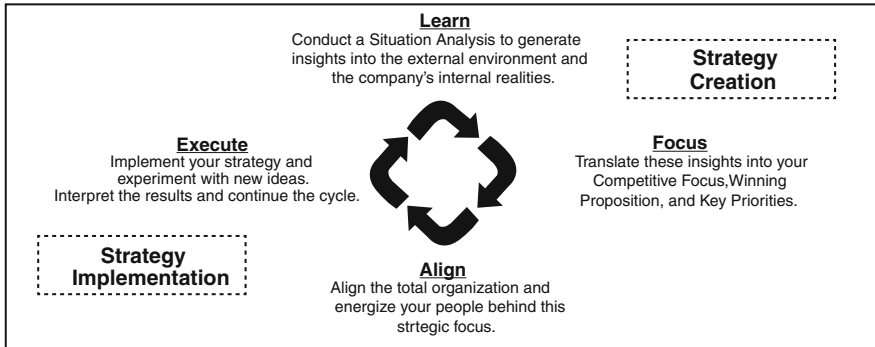
## 6.2 Assessing Changes in Executive Education

Ericsson took its executive education programs to new levels under Par-Anders Pehrson, then Vice President of Leadership, who had already begun to align executive development with the management planning process. Selection of managers, historically, had been influenced in part by “who you knew or how long you'd been in the company or what your network was.” To link development even more tightly to strategic goals, Pehrson sought ways to more effectively identify, develop, place, and leverage, top talent. Leaders who became more effective in implementing strategy could help Ericsson generate better business results and superior value for shareholders.

### 6.2.1 What the New Program Looked Like

After visiting six universities in the United States and Europe, Pehrson and his colleague Stephen Newman, then Program Director for Executive Development, chose the Executive Education program at Columbia Business School (CBS) as Ericsson's partner for developing its top 200 leaders. CBS co-designed and delivered a custom program to grow leaders to drive strategy development and implementation. One reason for choosing CBS was the strategic learning cycle (Fig. 6.1) developed by Willie Pietersen—a former CEO and Professor of the Practice of Management at Columbia Business School.

Pietersen (2002, pp. 57–58) viewed strategy development as an emergent process that is based on knowledge sharing and learning. Pietersen's four-step cycle involves learning, focusing, aligning, and executing. *Learning* involves conversations with many stakeholders, based on data, to understand and gain fresh insight into the external and internal environment. Learning through this situation analysis develops *focus* needed to make strategic choices. These first two steps dominate in strategy creation. The next two steps are critical to effective strategy implementation: *aligning* people and culture, structure and process, measures and rewards; and experimenting with new ideas as the strategy is *executed*. These four steps are iterative and non-linear, forming “a continuous cycle of learning and renewal.” Pietersen's cycle embodied what Ericsson wanted to achieve.



**Fig. 6.1** Strategic learning cycle adapted from W.G. Pietersen (2004)

The first CBS custom program, delivered in 2000, consisted of 2 week-long modules separated by about 3 months. In the first module, participants mastered the strategic learning cycle, examined industry issues, and benchmarked other companies. Colleagues coached one another on a personal case based on their work challenges. They worked in Action Learning groups on strategy projects to apply what they had learned. Between the first and second modules, participants applied what they had learned back on the job, and when relevant, continued work on strategy projects in Action Learning groups. In the second module, the focus shifted to strategy implementation and development of leadership capabilities, including creation of a personal leadership “credo.”<sup>1</sup> They continued consultation on personal cases and business issues, and engaged in work on a new Action Learning project. Thus, the first module focused on *strategy development*; while the second module emphasized *strategy execution*, change, and personal development as leaders.

The program had been tweaked since 2000, but its core design had not changed significantly. Participants still worked on Pietersen’s strategic learning cycle and leadership credos, coached one another, and worked on real business challenges in the company. Over time, faculty experts and resource people had also changed to reflect industry trends or company needs.

Until 2003, the CEO approved participant nominations and sent out invitations to nominees, but did not get actively involved in selecting projects. In the first program, participants suggested topics that helped them apply what they were learning. The internal program designer helped define and scope projects in the second and third programs. With the fourth program in 2003, however, the newly appointed CEO, Carl-Henric Svanberg, took special interest in the program and in project selection. Projects were linked directly to priorities set as part of a new

<sup>1</sup> Pietersen (2002, p. 229) says that when a leader writes “a Leadership Credo . . . you define your core principles and your theory of success for your business—‘This is what I believe in, and here’s how we are going to win’. The Leadership Credo is the vehicle for integrating organizational strategy with leadership effectiveness.”



annual strategy development cycle. And when groups presented recommendations for these projects at the end of the module, senior staff actively engaged groups in conversation about their ideas.

### 6.2.2 A Critical Convergence

Benefits of partnering with CBS grew as the industry-wide crisis of the late 1990s and early 2000s started to subside, and Ericsson's efforts to restructure and down-size took effect. The Pierson model eventually became the "official" Ericsson process for developing strategy after the new CEO took over. The language of strategy, as developed in the company and taught in the program, was now the same.

Ericsson had hopes for even greater benefits from the fifth program in 2005. Strategy messages were being delivered and implemented with more consistency. Leaders in the program were moved into positions where they could fully use their expertise to help develop and execute strategy, which was not always the case in earlier programs. Greater alignment between executive development and management planning was beginning to pay off for the company.

### 6.2.3 Huber Institute's Assessment of Fifth Custom Program

In 2004, Ericsson and CBS invited the Huber Institute to assess its fifth custom program to find out more about its impact.<sup>2</sup> The Huber Institute assessment was designed to shed light on what individuals and the company gained from the program; links between gains and progress toward strategic goals; as well as barriers to and supports for achieving desired gains from the program. The assessment focused on expected outcomes and how Ericsson might best leverage these outcomes to achieve strategic goals.

The program was designed to develop high potential leaders, address strategy challenges, and develop broader organizational capability to support strategy. Two program features helped to reach these goals: (1) Pietersen's strategic learning cycle, and (2) real work in Action Learning groups on selected strategy challenges.

---

<sup>2</sup> Pehrson had participated in a Huber Institute study of how innovative companies use learning strategically to meet critical business challenges. Bill Klepper, the lead academic at CBS Executive Education for the program, and Stephen Newman, the program's in-company director, both saw that strategic learning was critical. All three wanted to better understand how executive education was working and identify ways to improve the initiative. Data collected for the assessment and reported in this chapter include: interviews with key designers/managers and with nine participants from programs that preceded the fifth custom program; interviews with six participants in the fifth program; four questionnaires administered between September 2004 and April 2005 before, during, and after the program; participant observation of program segments; and documents (annual reports and related program materials). We created a customized survey based on our *Strategic Leverage through Learning*<sup>©</sup> model.

Recommendations developed by groups would be used to address strategy challenges.

The program was designed to build leadership networks to make it easier to share knowledge, solve problems, and spread learning across the organization. This, in turn, would accelerate strategy development and implementation in the company and improve alignment across boundaries.

---

## **6.3 How the Program Made a Difference**

How did the executive education program make a difference for individuals and Ericsson? Leaders gained: a deeper understanding of the strategy, mastery of skills used in strategy development and implementation, and personal and leadership development. (All participant examples in this section use pseudonyms.)

### **6.3.1 Strategy Development and Implementation**

The program deepened understanding of the company's strategy. It helped leaders to internalize the vision and align strategy across the company. Leaders looked at what had been going on—strengths, weaknesses, and where Ericsson could focus and allocate resources to become the best in the world, if possible, in one or two or three areas. Leaders became clear about strategic priorities, which guided how priorities were locally interpreted, based on their business, market and customers. Strategy was clearly communicated throughout the company, and the right people were involved in its development and implementation.

Over the course of the program, conditions for effective strategy implementation were also strengthened, in particular:

- Ensuring that responsibilities of managers were clear
- Putting the right structures and processes in place to support strategy development and implementation
- Hiring people with the right competencies to implement the strategy

Adoption of the Pietersen strategy cycle enabled leaders who went through the program to speak a common language and use a common process to get everyone on board quickly and effectively in strategy work. Leaders said it “put the whole cycle together in an easy context and in a structured way.” Leaders found it to be “well-documented, hands-on, and easy to communicate.” They wanted more to be done to spread familiarity with the cycle to those who had not yet participated in the program.

By mastering and using the strategic learning cycle, leaders began to:

- Avoid jumping to conclusions by using a step-by-step process
- Think from the outside in
- Focus on business needs
- Seek and use the customer and market viewpoint
- Prioritize and focus
- Execute more effectively by aligning the organization behind the strategy

Boiling down extensive information into one page of key insights fed the development of a ‘winning proposition’ and helped set clear priorities. Clear priorities made it easier to execute effectively on decisions. One page of key insights, backed by a business case, enabled leaders, in turn, to communicate clearly with others about the strategy.

### 6.3.2 Personal and Leadership Development

The program, overall, helped participants “raise their game significantly.” As one leader said, executive education at other universities may cover similar topics, but “they forget to make use of how you will use it when you are in a senior role, how to use it with strategies. So they don’t glue the two things together.” The CBS program, by contrast, “helps you with your own principles, your own understanding of yourself and how you can work with people” in ways that are tied to understanding and implementing strategy.

Leaders became more skilled in communicating with others, building teams, and influencing upwards, sideways and downwards. They coached one another on challenges they faced, developed self insight and self-confidence, improved competence, and strengthened relationships with others on whom they called when back on the job. They learned to work effectively with people, and to empower/motivate others. They observed and reflected on their own behaviors as leaders. They gained skill in effectively managing change and managing groups.

Leaders recounted ways that the program transformed their personal and leadership abilities. Henry, for example, was better able to shepherd the merger of two country offices with a history of strife because of “the hidden dimension” of the program, its power to “unleash hidden potential in all of us . . . , enabling the human factor and engaging to reach higher-level goals.” The program transformed what leadership meant and helped this leader “get true followership in building things. . . as “a champion of change.” Teamwork was “key to everything. Teams were used during the merger of the two country offices “to build trust and confidence.” This leader took teams through the four key steps of the strategic learning cycle over 14–15 months: “getting the champions in place, and then carrying the critical mass through measuring, modifying and completing.” Personal and leadership development helped him execute on strategy.

## 6.4 How Participants Used What They Learned

Leaders creatively adapted Pietersen's model to drive strategy down into the company. Examples from the fifth custom program illustrate these gains. They show:

- How the strategy cycle was adapted for needs of business units
- How Ericsson capitalized on outside-in thinking to develop strategic insight
- How leaders changed structures, behaviors, rewards and processes to support their work.

### 6.4.1 Adapting the Strategy Cycle to Business Unit Needs

Two leaders, Mark and Anthony, adapted the cycle for needs of business units at middle levels of the organization.

#### 6.4.1.1 Developing Locally-Held Situation Analysis Strategy Workshops

Mark worked in Total Customer Solutions. While in the program, a promotion increased Mark's responsibility for strategy by putting him in charge of marketing support for customer solutions—including market analysis, business intelligence, strategic governance, and support for the market unit management team. Mark provided situation analyses needed to set corporate strategic priorities at the top. But he also developed a new process through which local business units searched for new opportunities in their markets that were congruent with corporate strategy.

Mark introduced a series of locally-held situation analysis strategy workshops, each dedicated to a single local opportunity, for example, whether or not Ericsson might want to set up a local video services center to offer media content for services they sold. Decisions about whether or not to move forward could be made by the local management team within the company's common framework. As Mark described it, "we decided to have a strategy process that is live during the year. So the cycle is much shorter than the annual cycle," but it feeds opportunities to management on a continual basis.

Mark used the strategy cycle in ways that replicated the process used at the top to take advantage of local opportunities in line with strategic priorities. In so doing, he further developed organizational capability in using the cycle.

#### 6.4.2 Developing Competence and Micro-Strategies for Operational Efficiencies

Anthony adapted the strategy cycle to achieve operational efficiencies in sourcing. He used the cycle to help his staff develop micro-strategies in different sourcing areas, as well as to hire for the right competencies and build teams that could share knowledge around sourcing. He noted that people in this role often worked alone

and in the same category for many years. Anthony thought they should not work on one category for more than 3 years, and they should change categories to get to know new suppliers. So Anthony formed cross-category teams of sourcing professionals and had more than one person sit at the table when negotiating sourcing agreements. In this way, he built and shared knowledge across the group for procurement of different products.

Anthony then asked staff to create micro-strategies for sourcing in different categories. He asked them to read Pietersen's book and conducted "two one-hour sessions with the sourcing professionals in Sweden" to introduce the methodology. He rolled out the development of these micro-strategies over the year so that groups could learn from one another. He lined it up so that three or four categories were due for completion at the end of every month and then had a joint review of those strategies. "We chose the ones that were either the most pressing or those where people were experienced in doing strategies so they could serve as role models for the rest."

For many, this was the first time they shared what they were doing with colleagues in any structured way. Documented strategies were put into place with a limited planning horizon of 18 months "to make it hands-on and tangible." Renegotiation in several major categories showed cost savings and improvements in service delivery.

### **6.4.3 Capitalizing on Outside-In Thinking**

We next turn to examples of leaders who used outside-in thinking as they implemented strategies. For the first example, we return to Mark's work in Total Customer Solutions.

#### **6.4.3.1 Bringing in Fresh Perspectives**

Restrictions on hiring made it challenging to get new ideas about customers and how things should be done. Mark described Ericsson as "inward" looking, making it difficult "to introduce different points of view and different competencies, different ways of looking..." Challenging assumptions was especially difficult because the company had been very successful.

Mark looked for ways to bring new thinking into the company. He included customers in market analysis teams. He drew on customers from telecommunications clients to put together a "marketing mutual team." He found ways to engage people who joined the company because of a merger to discuss their different points of view.

#### **6.4.3.2 Networking and Partnering to Sell Services**

Carol was promoted during the program. She also adapted the strategy cycle with her team. "Once we did the first brainstorming and prioritization, people started thinking in the same way and focusing on it without anyone telling them." Even

though they “were not familiar with this particular tool, they were impressed with its use and very happy with the result.”

Selling new services begins by talking with the customers to understand their needs. The next step is to “bundle all that together and try to put some sort of strategy document in place for the opportunities . . . and talk to people in the services organization who help map it into a sales opportunity.” We “pretty much custom-make our own solution. Then we go back and talk some more, price it, and get it approved.” The process involves a lot of brainstorming and negotiation—with the customer, with the region, with corporate, and sometimes with the customer’s corporate headquarters. Carol networked with people who sell in-building solutions around the world: “We constantly share information about vendors and opportunities and the way we’re working, and different developments in different areas.” Sharing knowledge across boundaries helped her save time by learning from their experience.

Carol also worked with external partners, which posed unique problems. “It’s a challenge to make them part of our offering when Ericsson is prime with a customer, and to ensure that we have our partners lined up in ways that represent Ericsson and the values we stand for.” Sometimes partners approached a potential customer with a joint story, and sometimes Ericsson fronted for partners or vice-versa. Carol relied on an outside group, contracted by Ericsson, to vet potential partners to add value and reduce risks.

Carol’s example points to the challenges of collaboration and alignment. A final example further illustrates those challenges.

### **6.4.3.3 Helping the Whole Office Learn Service Work**

Angela used the strategic learning cycle to help entire offices learn to deliver services and restructure themselves to support a very different way of working. Angela helped offices where Ericsson wanted to move into services, but where the general manager did not yet understand this new line of business. She took over services temporarily until she was “sure that these people can do it themselves. And then I can transfer the knowledge. . . . I evaluate the business to see if it’s a real opportunity.” It would be better not to take the business if Ericsson could not execute to a customer’s satisfaction. “Then we fail. And instead of winning more contracts, we’re going to get a bad reputation in the market.”

Angela learned to diagnose the capability and readiness of local staff to run the business. Did the local staff buy in? Were they able to change their thinking? The organization had to change the way it worked in the services business, including customer relationships. “Your best friends are your worst enemies” in services work. So you need to start building new strategies, building new ways of organizing, new ways of thinking, and new culture.”

Angela could not do the work herself or the country office would not own the process. She worked with people in the local office, often the first or second-line managers down from the head of the office, to help them figure out what to do next to implement strategy. Then she left it to them, and returned some time later to check on where things were and to pave the way for the next step. “I do half the

work and then ask them to read it and understand it. And now they have to start changing the organization, the culture, the people to be able to complete the cycle.” She “learned you cannot do and think for them. You have to allow time for change.” Changes needed to be made locally to adapt strategy from Sweden to suit the local culture, local employees, and local customers.

---

## **6.5 How Leaders Engaged Organizational Learning**

The above examples show how leaders who mastered the strategy cycle in executive education used what they learned in the program to effectively develop, adapt, and implement strategy in their work. In doing so they:

- Built critical mass for use of a common framework and tools as leaders adapted the cycle at local levels to address implementation challenges in their work
- Put new systems and processes in place by adding strategy processes for local needs or re-structuring for Services work
- Shared knowledge across boundaries, including customers and suppliers.

Each of these mechanisms helped the organization to learn.

### **6.5.1 Building a Critical Mass**

Over time, the program built a critical mass of leaders who were changing the way that Ericsson worked. As one leader noted, “A pretty big chunk of the top leadership in this company that is going to take this company forward over the next ten years” has now participated in the program. “If all these people have the same shared vision of what strategy should do for the company and subscribe to it, we will be much better off as a company in the future because we’ll all be working in a synchronized way.”

Leaders had not been as extensively involved in strategy development and execution prior to these programs. Using the strategic learning cycle broadly and deeply in the organization helped people more easily grasp the CEO’s messages and the way in which measures, behaviors and rewards could be used to drive strategy throughout the company.

When these leaders effectively tackled challenges back on the job, they adapted the cycle—originally designed for shaping strategy at the top—to mid-level strategy implementation. Employees at many levels became familiar with the cycle. They spread use of a common approach and aligned strategy from the top of the company down into its middle ranks.

### 6.5.2 Changing the Way the Organization Works

It is not enough for *individual* leaders alone to change the way they think and work. They must bring the *organization* along with them. Changing the organization, as the above examples show, requires changing structures, processes and culture. Pietersen urged leaders to “think of an organization as an ecosystem—a rain forest, perhaps or an oasis in the desert. An ecosystem functions successfully only when its interdependent elements support one another.” Leaders learned that a single action was not a magic bullet. “Instead it comes from orchestrating the right *interactions* so that all the key elements of the business system are working together synergistically to support the new strategy.”<sup>3</sup>

Leaders helped the organization streamline processes, put new structures in place, hire and develop the right people, and measure and reward results. For example, Henry empowered teams he created to shepherd the merger of two country offices with a history of strife, and Angela introduced services to countries in ways that developed local office capacity to change.

### 6.5.3 Sharing Knowledge Across Boundaries

Organizational learning is fueled by new ideas gained through sharing knowledge and tapping into the knowledge of customers or other people outside of one’s ordinary boundaries, as the above examples illustrate.

Mark learned from employees in the customer’s company who brought different experiences and points of view to the table. Anthony created and rotated teams of specialists who worked together on different products or services over time. Carol networked with other parts of the organization, customers and suppliers to solve challenges of building services contracts for a new market and to make sure that Ericsson chose the right external partners.

Knowledge sharing was supported in the CBS program through peer coaching, discussion of Ericsson business issues, and Action Learning project groups. Because peers from different parts of the company—and/or with “a great deal of cultural and geographic diversity—could examine the problem “from different angles” and “with new eyes, they come up with solutions that take you away from where you have been stuck.” Leaders found it added value to listen and learn from others from different disciplines or functions because as one leader put it, when “you have been working in this company for so long, you end up with a uniform.” Sharing knowledge across boundaries pushed leaders to move outside their comfort zone and encounter fresh insights that led to innovative thinking and action.

---

<sup>3</sup> Pietersen, op. cit., pp. 63–64.



## 6.6 Catalyzing Effect of Networks

Some companies rely on common structures and processes to ensure that the right people are engaged at the right time and that the organization is aligned to meet its strategic goals. In Ericsson, a history and tradition of alignment through networking played a key role in catalyzing organizational learning and alignment for effective execution of strategy.

The closeness engendered by working together in condensed time frames on challenging strategy projects important to the CEO built strong bonds. Leaders found it easier to call on people from the program because “he or she knows me already and knows what I am talking about. And I would value his or her answer” for the same reasons. “You can read organizations from charts, but when you have time to talk through lunches and dinners and evenings and trainings, then you learn how they really work.”

Leaders used networks to get information, solve problems, find the right person, locate expertise, and get advice. Networks in Ericsson worked through personal contacts. Without the right networks, it could be difficult to “locate the right person to get the key to solving your problem.” With peers from the program, credibility and trust had already been established.

Carol’s story, above, underscored the value of networks for catalyzing organizational learning. Carol drew on peers who had experience in selling the kind of service contracts she was promoting in new territory. Cross-functional networks helped her put together a package of products and services that would provide the customer with a “total solution.” Cross-organizational networks helped her partner with other companies that could also be competitors in other markets.

---

## 6.7 Organizational Supports for and Barriers to Strategy Work

Leaders commonly agreed on two strong supports for strategy work:

- Consistency of messages about strategy from the top of the organization
- The ability to motivate and empower staff

Strategy workshops for top managers were held annually in some form to provide “consistency in the exchange of information around strategic direction and critical issues” and to obtain buy-in from key stakeholders, which was consistent with a cultural norm for building consensus.

Motivation and empowerment have been consistent messages reinforced through executive education, for example, when Henry merged two country offices

that had a history of strife. Other leaders in this chapter also described ways that they motivated or empowered staff to execute strategy.

Consistency of messages and the ability to motivate and empower staff were tools for alignment of message, people, culture, structure and processes. While Ericsson made progress in these areas, leaders also indicated that there were still many barriers to optimum alignment. Many different business units worked together in a decentralized company to sell products and services. As one leader described: “It’s very difficult to ensure that the message does not vary because things are not black and white, there are opinions, there are interpretations. So you run the risk of changing meaning through all those interpretations.”

Leaders described in this chapter often enhanced coordination and alignment. Leaders described the value of regional account structures and coordination within units. Technologies needed different kinds of support. Product delivery often required coordination across many different business units, but product units were not always linked closely enough to market units. Leaders had to negotiate across different business units “to align the goals vertically from bottom to top through the business units, so that all the goals support each other.”

---

## 6.8 Summing Up

Ericsson’s CEO today, Hans Vestberg, described 2012 as “a year of growth in Global Services and Support Solutions, but more challenging for Networks” and indicated that Ericsson had “extended our leadership in several key growth areas and taken important steps in executing our strategy” (Ericsson 2012). Ericsson’s refocused strategy was successful. The company had success with delivering innovative products and services, coupled with streamlined operations and greater discipline in achieving its refocused goals.

Company leaders refocused strategy and put centralized controls and decision making in place in response to major shifts in the telecommunications industry in the wake of an economic downturn, global competition, technology changes, and new consumer demands. A new leader recognized that the company’s strong suit in innovative technology had led to getting ahead of the market. The new leader did not want to completely rebuild the culture but he needed to gain stronger internal alignment committed to the new strategy.

Ericsson had always been a decentralized company. Managers had a good deal of autonomy; its culture has been driven by consensus. Its top leadership has been Swedish, as have been many on the executive team. The company has been managed from the middle. Decisions were not made solely at the top.

Ericsson redesigned executive education to build leadership commitment, skills and networks to support its new strategy. Seeking new university partners, they selected the Columbia Business School and co-designed a program with strategy

development and execution, based on Pietersen's model, as its centerpiece. Leaders selected projects linked to strategic priorities. Collaboration throughout the program further developed executive networks that were how work got done.

Alignment in execution in a consensus-driven company depends on leaders working together across global and functional boundaries. The redesigned executive education programs built a cohort of leaders who shared a common language, which was reinforced when the Pietersen model became the "official" strategy model in the company.

Ericsson's top leaders relentlessly communicated the new strategy and supported it through changes in strategy development and by setting new expectations and putting in place new metrics and reward systems. They involved Ericsson's top 200 leaders in making sure the right strategy was put in place. They trusted these leaders to do what was needed to engage others in the organization in learning and using the new language and model.

Key individual take-aways from executive education developed organizational capability. Leaders became the engines for modifying and aligning management practices and systems at the middle level of the company to achieve strategic priorities. It took a while to build a critical mass, but over time, use of the same model around the world built a common language, framework, method and tools for executing on strategy. Examples in this chapter show how leaders adapted the strategy cycle to the needs of their business units. They also used changes in key behaviors, measures and rewards to align people for strategy execution.

Ericsson did not seek to *change* its culture so much as to take advantage of its strengths and to leverage organizational learning to improve alignment toward strategic goals. Ericsson grew leaders who were able to collaborate and network with one another effectively in ways that circumvented some of the challenges that would otherwise have stood in the way of success.

---

## 6.9 System Dynamics: Our Model

Implementing a new strategy always involves the identification and correction of misalignments. This was especially true in a company such as Ericsson, which had moved to a more centralized strategy but relied on informal networks and a consensus culture, rather than structure and hierarchy, for smooth implementation. The story in this chapter is about how executive education was leveraged to build internal alignment among leaders, engage their commitment to the new strategy, and put structures, processes, and mechanisms in place—that leveraged the Pietersen model, tools and language—to drive the new strategy throughout the company.

Ericsson had built its reputation on its innovative technology, which in turn was supported by hiring talent with these capabilities, providing opportunities to innovate, and knitting together operations to support the marketing of products thus

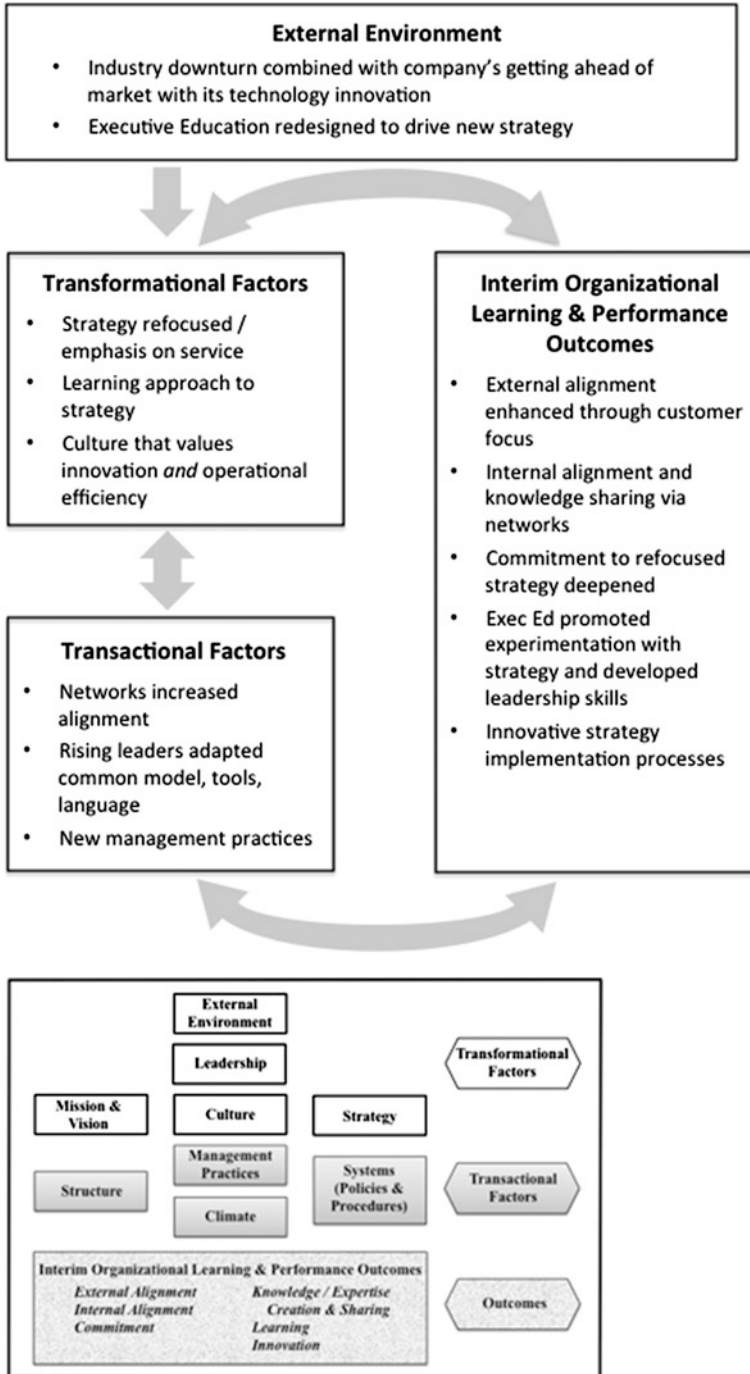
created. When innovation got ahead of the market, the new CEO set a course that balanced innovation with optimum alignment. That is, the CEO coupled innovative capabilities with greater ability to identify and listen to the voice of the customer and with streamlined operational efficiencies to support focused priorities. The CEO communicated these priorities well, clearly, and frequently. However, the apparatus was not fully in place for well-knit, company-wide support. Leaders would benefit from opportunities to collaborate using a common framework, tools and language to address the company's challenges both in the development program itself and through broader work in the company to drive the new strategy throughout the organization.

The leadership development program—with its focus on the Strategic Learning cycle, leadership to support strategy implementation, as well as collaboration and peer learning from real work challenges surrounding strategy—built and enhanced alignment among a network of leaders who then called upon one another for help in addressing their own challenges of strategy implementation.

The company carefully selected leaders to drive strategy, identified challenging action learning projects linked to the refocused strategy to work on through the program, helped leaders identify their leadership credo linked to the business vision, and empowered them to adapt the Pietersen Strategic Learning cycle—which the company officially adopted as its strategy development and implementation approach—as they applied what they learned to their business challenges. Strategy implementation capabilities were thus aligned with the company's "way of doing things" and driven more deeply and widely across the organization to effect strategic priorities. Moreover, the common model and language offered through the program based on the Pietersen Strategic Learning cycle made it easier to communicate with one another and with others in the company who were involved in strategy implementation.

Thus, the program built capabilities, and reinforced, a learning approach to strategy development and implementation. Leaders learned by experimenting with new ideas and ways of working, and learned from the process. They used their insights to improve strategy implementation at Ericsson. The result was greater alignment in support of clear priorities that were set through conversation with key stakeholders, including customers, thus ensuring superior insight that helped Ericsson remain an innovative technology leader in ways that stayed abreast of the market and increased market share.

Figure 6.2 summarizes key system dynamics in the Ericsson case as reflected in our model, *Strategic Leverage through Learning*®.



**Fig. 6.2** Key system dynamics in Ericsson case with schematic of our model (Fig. 2.1) included for comparison

---

## References

- Ericsson. (2012). *Bringing the networked society to life*. Annual report 2012. [www.ericsson.com](http://www.ericsson.com)
- Ericsson. (2014). *Welcome to the networked society*. Annual Report 2014. [www.ericsson.com](http://www.ericsson.com)
- Pietersen, W. (2002). *Reinventing strategy: Using strategic learning to create and sustain breakthrough performance*. New York: Wiley.
- Pietersen, W. G. (2004). A leadership process for creating and implementing breakthrough strategies. [www.williepietersen.com](http://www.williepietersen.com)

---

# How Schools Learn to Collaborate and Change Their Cultures by Implementing an Autism Model Program in Inclusive Classrooms

# 7

Joint Work with Suzanne Kucharczyk

---

## 7.1 Overview

Schools are often described as nested systems—each classroom is itself a micro-system, that in turn, is joined with other classrooms by grade level or other purpose to work together for different student or educational needs. Change involves a good deal of coordination from units that operate somewhat autonomously though often in tandem.

Schools are, at the same time, both: hierarchical and decentralized; contained yet highly connected to the families and communities they serve; autonomous yet highly influenced by district offices, political systems, and support providers. Classroom teachers draw upon, and work with, many specialists—e.g., clinicians, therapists, counselors, paraprofessionals, healthcare workers, special education professionals, or coaches—who need to be part of the school-based conversation. Teachers and specialists need supportive leadership, structures, processes, and cultures to be successful.

Schools share common purposes and practices, but they differ greatly in how they implement these practices because of the diversity of their contexts. Change may be implemented in classrooms, yet coordinated action is often needed across classrooms and grade levels to reach school-level visions and goals. How do schools develop the capacity to learn as systems in order to sustain innovation in the face of so much complexity?

This chapter sheds light on this question by drawing on examples from a particular intervention—an innovative, research-based educational model designed for children who have Autism Spectrum Disorders (ASD)—with a view to under-

---

Dr. Suzanne Kucharczyk is an Assistant Professor, College of Education and Health Professions, University of Arkansas, Fayetteville, AR 72701.

standing how schools as systems learn, given the above needs and mix of diverse contexts.<sup>1</sup>

Today's schools are challenged to educate an increasing number of children with ASD (Centers for Disease Control and Prevention 2007, 2009), with diminishing resources, and within environments that continue to be resistant to long-term positive transformation (Fullan 2001; Leithwood 2000; Leithwood and Louis 1998; Leithwood et al. 2007).

---

## 7.2 The AMP Model

Begun in 2003, AMP is a multi-school program, which nests inclusive classrooms for children who have ASD within supportive neighborhood schools. Inclusive classrooms are classrooms in which students with disabilities are educated together with typically developing students. Neighborhood public schools are those which children would likely attend if they did not have a disability. AMP's model is based on Gutstein and Sheely (2002), Cohen (2006), and Crimmins et al. (2007), and incorporates recommendations made by the National Research Council (2001) for children with ASD. For a snapshot of elements included in the model, see Fig. 7.1.

Collaboration is central to the vision and reality of AMP. Teachers work daily with other teachers and professionals to adopt and adapt research-based strategies to reach children on the autism spectrum. Three features of AMP reflect its highly collaborative approach: team teaching in the classrooms, work across disciplines with many skilled professionals, and team meetings where progress of students is discussed.

An external network provides direct implementation support to AMP schools. The support network is a loosely coupled web of expertise, professional development and peer support. This web forms a community of learning and practice made up of individuals employed by two universities, the school district, and each of the participating schools.<sup>2</sup>

### 7.2.1 Team Teaching in the Classrooms

A core feature of AMP and other models for teaching students with various learning disabilities is Collaborative Team Teaching (CTT). The CTT model is the school district's primary model for inclusive classrooms. Developed in 1992, CTT pairs a

---

<sup>1</sup> This chapter is based on Kucharczyk (2011).

<sup>2</sup> These individuals include the AMP program director, the developer of AMP instructional content, a group of subject matter experts who provide initial and ongoing professional development, consultation and coaching, and school members including principals, teachers, speech therapists, social workers, occupational therapists and so on.



Autism Model Program KEY ELEMENTS		
Primary Model Architecture	Specialized and Ongoing Professional Development And Support	Other School Board Elements
<ul style="list-style-type: none"> <li>• Two “micro” collaborative classes per grade level</li> <li>• Specialized curricula and instructional strategies in socialization, adaptive skills and communication in, and reduction of problem behaviors</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative team teaching classes have two teachers—one general education and one with special education certification</li> <li>• Collaborative and transdisciplinary approach to teaching and integration of related services</li> </ul>	<ul style="list-style-type: none"> <li>• Specialized pre-service learning for all staff</li> <li>• Specialized episodic and ongoing in-service learning for all staff</li> <li>• Discipline-specific in-service learning for some clinicians every 6-8 weeks</li> <li>• Pre-service supervisor e.g., principal orientation</li> <li>• Ongoing supervisor leadership support through leadership meetings</li> </ul>
		<ul style="list-style-type: none"> <li>• Weekly 90-minute team meetings</li> <li>• School-wide positive Behavior support system</li> <li>• Initial and ongoing Home School communication led by each school’s social worker</li> <li>• Coverage of teacher prep and lunch by cluster teacher</li> </ul>

**Fig. 7.1** Key elements of Autism Model Program (AMP)

general education teacher with a special education teacher.<sup>3</sup> Schools participating in the implementation of AMP usually have two CTT classrooms at each grade level. Unlike other district CTT classrooms, AMP CTT classrooms have a larger ratio of general education students to students with disabilities.

Relationships between general and special education teachers within AMP classrooms are often described as “marriages,” and those that fail as “divorces.” Co-teachers spend all day, all week negotiating their roles and expectations of each other. Trust allows teachers to make seamless, almost unvoiced decisions throughout the day without needing to disrupt the classroom to engage in in-depth discussion.

### 7.2.2 Transdisciplinary Collaboration

AMP follows a transdisciplinary model (Kabler and Carlton 1982) to facilitate the sharing of knowledge and skills across disciplines. AMP classroom teachers, work closely with many other professionals—such as occupational therapists, speech therapists, social workers, and cluster teachers—as well as parents. To ensure the

<sup>3</sup> All education related to how to approach collaborative teaching is provided by the district. The district-wide CTT model utilizes Dr. Marilyn Friend’s approach to collaborative teaching (Brownell and Walther-Thomas 2002; Friend, 2000, 2007; Friend and Pope 2005).

use of effective interventions throughout each child’s day, services are provided within the classroom rather than students being “pulled out” for services. AMP certified “cluster teachers” support students in art, music, and physical education—and during lunch—when classroom teachers are not with students.

### **7.2.2.1 Social Development Intervention**

Social development intervention (SDI) groups exemplify transdisciplinary collaboration and learning. In SDI groups speech therapists, provide instruction on social and communication skills directly to students with autism spectrum disorders, with the support of CTT and/or cluster teachers. This enables cluster and CTT teachers to learn the interventions, share observations, and bring the interventions back to the classroom.

### **7.2.2.2 Collaboration Within the Network**

Schools are supported by the external Network—beginning with consultation between the AMP Network Director and principals, and continuing with the provision of pre-AMP coursework and many on-site visits to work through practices and challenges. AMP consultants provide intense, early support during implementation. Their onsite support tapers off as schools become more experienced and proficient. By the third year of implementation, schools are expected to take responsibility for their support needs. Team members are still expected to call on consultants as needs arise.

### **7.2.2.3 Team Meetings**

Team meetings are at the heart of AMP’s collaborative transdisciplinary model. The AMP Network Director of AMP sees the team meeting as the mechanism within which acculturation to AMP occurs and through which a common vision is developed.

Each school’s team consists of CTT classroom teachers, the AMP cluster teacher(s), the speech and language pathologist(s), the occupational therapist(s), the social worker and the principal or assistant principal. Meetings promote collaboration and problem solving, and build consensus. Meetings occur once a week for 90 minutes. Team members rotate roles of facilitator, agenda producer, timekeeper, and recorder. Meetings include time for business issues, case conferencing for specific students, and professional development. As schools incorporate more AMP classrooms, each school team decides how to restructure meetings to ensure that all voices are heard.

---

## **7.3 The Schools**

This chapter illustrates organizational learning and knowledge sharing in and across four elementary schools within a single urban school system that have implemented an educational model for children with autism with support from an external network. The chapter shows how learning and knowledge sharing *can* involve

whole system learning—with the system defined as a network of schools supported by a network of educators who designed and support the innovative, evidence-based model being implemented.

We probe in some depth examples from two elementary schools— Washington Elementary and Lincoln Elementary (pseudonyms) that implemented the AMP model differently, both with good results. Their experience is then compared and contrasted to identify ways that the AMP model was tailored to their settings. In doing so, examples are also drawn from two additional successful schools—Jefferson Elementary and Adams Elementary (also pseudonyms).

In 2006, Washington Elementary and Lincoln Elementary had deeply rooted challenges that their leadership and committed faculty were attempting to address. Washington Elementary had already survived two district led shutdowns and restructuring processes and there was a district expectation of future failure. Lincoln Elementary’s faculty lacked cohesion and there was little collaboration with the special education school that shared its building. Meanwhile, the schools were experiencing an increase in the number of children with autism they were educating. In response they signed onto a program model promising resources, professional development support, and expert guidance. What was not clear then was that the buy-in to the model would be the cornerstone to the changes needed to address the schools’ challenges.

By 2011, it became clear that the schools’ implementation of the Autism Model Program (AMP) (also a pseudonym) facilitated not only effective professional development for educators working with children with autism, but also the change process necessary to meet broader transformative strategies. These small elementary schools serve as examples of how the implementation of a highly collaborative, strength-based model can shift ingrained, maladaptive cultures and practices within the target group of professionals and beyond.

Three of these four schools have relatively small student populations. See Fig. 7.2 for brief descriptions of these schools. Two of the three schools, Washington and Lincoln, experienced transformation at multiple levels—classroom, AMP teams, and school.

Adams Elementary effectively implemented AMP in its first year, but did not have sufficient administrator support to sustain implementation in the second year. Despite these challenges individual professionals and classrooms felt the significantly positive effects of the model at Adams Elementary.

Jefferson Elementary is a large school with over 750 students. Jefferson did not experience the extent of transformation at the school level. However, transformation was evident in this large school at the team level. Teams significantly shifted their approach to working and supporting each other in their education of children. The implementation of AMP has the capacity to remarkably impact change in schools at multiple levels. The size of this impact depends on the size of the school.

Having set the stage for how collaboration is enacted in AMP, we turn next to the stories of how two schools learned how to implement AMP—Washington Elementary and Lincoln Elementary.

**Washington Elementary** is located in a low-income urban residential neighborhood and had a total student population of 218 in 2008-2009 with 86% of students receiving free lunch, and a majority of students described as Black (21%) or Hispanic (76%).

**Lincoln Elementary** is located in a working and middle-class urban residential neighborhood and had a total student population of 270 in 2008-2009 with 39% of students receiving free lunch. Lincoln had a diverse student population with students in 2008-2009 described as: 1% American Indian, 35% Asian, 10% Black, 22% Hispanic, and 32% White.

**Jefferson Elementary** is located in a moderate-income suburban neighborhood and had a total student population of 757 in 2008-2009 with 27% of students receiving free lunch, and a majority of students described as White (77%).

**Adams Elementary** is located in a low-income, working-class urban residential neighborhood and had a total student population of 235 in 2008-2009 with 63% of students receiving free lunch and a majority of students described as Hispanic (77%).

**Fig. 7.2** Profiles of four AMP elementary schools (using pseudonyms) in this chapter

## 7.4 How Washington Elementary Learned to Implement AMP

The new principal of Washington Elementary was wary when first introduced to AMP, and worried that the school would be “the guinea pig for this program that may or may not work.” The principal was protective of a school facing district level and community scrutiny. The school was considered a failing school and the principal faced the daunting responsibility of leading a turnaround. Ultimately, AMP became the cornerstone for that transformation across the school. The culture shifted from isolation to collaboration. Teachers opened their doors to their peers, and in so doing learned from both effective and ineffective practices that previously lived behind classroom doors. These open doors were extended to parents and the community as the AMP team, and ultimately the school, became more confident in working towards change.

### 7.4.1 Leadership

The story of Washington Elementary is a story of how the school AMP staff learned to rely on the core team and the team process, despite a rocky beginning. Even though school leaders signed on to the program, their leadership of the AMP team had mixed results. In the second year, a speech therapist stepped into a leadership role. She provided commitment and management that allowed other team members to do their work well.

### 7.4.2 Team Meetings

In the first year of implementation, the overwhelmed principal and vice principal set agendas, ran the team meetings, and prioritized Board of Education business and academics which limited time for case conferencing. Additionally, during team meetings first grade and kindergarten teams met separately which made it harder to share knowledge across the school grade levels.

The second year marked a sharp change when one of the speech therapists took over facilitation of team meetings. The team became stronger, and members became more effective leaders. Members learned to lean on one another. They remade the structure of the team meeting in order to get their collaborative needs met. Teachers across grades learned from one another when addressing common challenges. Members shared team roles (agenda maker, facilitator, time keeper, minutes keeper) and scheduled discussion of particular students on a rotation basis, rather than in an ad hoc manner, ensuring that each student received equal attention.

The team recognized they still needed to improve aspects of how they ran team meetings, such as finding ways to codify shared knowledge so that it was easily accessible between meetings, or recognizing and avoiding redundancy within meetings. Nonetheless, team members described meetings, once changed, as collegial, collaborative, exciting, enjoyable, and intense. Their team meeting became a model for other schools in the network.

### 7.4.3 Collaborative Relationships

Teachers described a fairly seamless relationship in the classroom that required nurturing by both CTT teachers. They learned to flexibly shift strategies depending on the lesson, the needs of the children, or their personal needs. They experimented with different ways of finding the “teachable moment” that would work in one or other situation. As in real life, CTT “marriages” sometimes need help to flourish. At Washington Elementary, CTT teachers could choose their partners but challenges sometimes arose. Washington Elementary was a small school, with limited resources, so separation could be difficult, especially if challenges occurred later in the school year. AMP team members sometimes needed help from the external support network to resolve difficulties.

Clinicians implementing AMP—speech therapists and occupational therapists who were used to pulling out individual children and working with them in isolation—learned to collaborate with teachers and other clinicians supporting those students. Their work moved from the safety and stagnation of isolation to the more vulnerable and opportunity-laden space of collaboration. Providing therapy alongside other professionals in classrooms offered frequent opportunities to give and receive feedback on their work. One occupational therapist, for example, found that AMP teachers valued her opinions, sought out her feedback, and had a clear understanding of her role within the educational progress of their students. Within the AMP team, she felt included in ways she did not otherwise experience.

#### **7.4.4 Informal Support**

AMP team members came to rely on one another for informal help. Team members better recognized when colleagues were struggling and sought out help more readily for themselves. Experienced clinicians connected with new clinicians at the beginning of the year, and team members spent more time with teachers in new AMP classrooms. Team members often ate lunch together and found other ways to collaborate, for example, by leaving notes for one another in a known space in the classroom.

Team members noticed when others struggled and pitched in to help. They initiated practices to address challenges that were systemic. For example, they noticed that cluster teachers sometimes struggled to keep up because their schedule made it difficult to get involved in many of the team's discussions. They rescheduled meetings to ensure that cluster teachers were involved in at least one social development intervention (SDI) group each week with their team, thereby gaining access to shared knowledge about each student.

#### **7.4.5 Outside Observations**

“Being observed” is a key component of AMP. Observations are frequent and performed by various people and groups. Being willing to be seen is a critical component of effective collaborative teaching relationships. As the school began to implement AMP, team members struggled to feel comfortable due to the vulnerability created by being observed and receiving feedback. As the Speech Therapist assumed leadership, psychological safety increased and team members were better able to accept constructive criticism. Over time, team members came to appreciate the hands-on support, ability to observe one another's work, and opportunity to share. They better recognized the value of this professional development tool. AMP members became accustomed to receiving feedback—not just in the safety of their classroom or school, but also during AMP-wide network meetings.

AMP school members were open to help from the support network. Teachers initially wanted to impress network professionals when they visited. They quickly dropped the need to be perfect when they realized this goal was not attainable or expected in the first year of operation. The support network consultant for Washington Elementary also learned the importance of “giving space when needed, giving support when needed” when working with teachers.

Taking responsibility for implementation provided teachers with empowerment and ownership of the process. Many teachers, however, have struggled with wanting more detailed instructions or prescriptions, especially in the beginning of implementation.

### **7.4.6 Knowledge Transfer Within and Across Schools**

The cluster teachers translated AMP guidelines and SDI curricula between AMP classrooms and cluster classrooms. Teachers of cluster classrooms were open to this new knowledge, including implementation of specific strategies and new vocabulary to use with students. Teachers in these classrooms sometimes expanded application of what they knew to classes in which there were no AMP students.

Professional development opportunities provided ample knowledge for AMP team members to share with each other and with other school staff. AMP members were invited to share knowledge with other teachers in the school during professional development activities or through implementing shared initiatives such as Positive Behavioral Interventions and Supports (PBIS). AMP members also shared knowledge they gained from external professional development provided by the AMP support network.

While the AMP program is rich in external and internal learning opportunities, the core learning that occurs is often on-the-job. On-the-job professional development is, in fact, a core focus of the support network. Support network members, further, shared knowledge of good practices at Washington Elementary with other schools in the network. The network used Washington Elementary as an example of good AMP implementation with other schools. The Washington Elementary speech therapist collaborated with the broader network of school speech therapists to create a “Social Development Gazette” shared across AMP schools. Washington Elementary helped put together a resource for cluster teachers across AMP. As seen in the next section, its social worker has also collaborated with the Lincoln Elementary social worker to develop and implement parent supports, including rotating which school holds parent support meetings each month.

### **7.4.7 Parent-School Relationships**

Relationships between the school and parents, once very strained, became more supportive and productive after AMP was implemented. An open-door policy, though always espoused, was not fully practiced before AMP. Teachers extended their advocacy, supported by the speech therapist, by sending home a newsletter to share the work of the classroom. They created one-on-one time with parents to teach them effective strategies. They invited parents to observe SDI sessions with their child. This led the support network director to notice increased levels of parent-school communication and to invite the speech therapist to help the network publish a monthly gazette to bring the curriculum into the home.

Parents of students not identified as having ASD were initially concerned about their child’s being in a “special class”. Over time they recognized the value of their child’s access to two classroom teachers, a cluster teacher, and talented clinicians. They recognized that their child learned within a rich environment staffed with highly supported and trained professionals. Rarely did parents complain of their relationship with the school or the school AMP team.

As noted above, transition to AMP at Lincoln Elementary occurred under different conditions than at Washington Elementary.

---

## **7.5 How Lincoln Elementary Learned to Implement AMP**

Like the principal at Washington, the principal of Lincoln Elementary was also wary when the AMP program was first introduced. She had been disenchanted by other programs coming into the school that did not live up to their promise, and thought “it sounded too good to be true.”

### **7.5.1 Leadership**

The story of Lincoln Elementary is a story of inclusion and shared leadership. Through AMP, the principal developed a strong value for inclusion and promoted it throughout the school. She shared this value through her expectations and modeling of AMP strategies for *all* students. The principal, social worker, and cluster teacher at Lincoln Elementary shared leadership. They worked both formally and informally to problem solve, strategize, and drive the AMP implementation process. The principal set, held, and modeled the vision. The cluster teacher provided core leadership during team meetings. The social worker coordinated visits in classrooms and liaisons with parents.

### **7.5.2 Collaborative Team Teaching**

As was the case for Washington Elementary, CTT teachers at Lincoln Elementary chose the teachers with whom they would like to be paired for the school year. The school also found that putting teachers in the grade level where they had the most experience teaching also helped to develop a trusting relationship.

Informal collaboration at Lincoln Elementary was not always simple and natural, in part because the school district had a history of isolation and of people “acting in a vacuum.” Learning to implement AMP nudged the school toward a different culture.

### **7.5.3 Informal Support**

Learning to support one another and move from the culture of isolation involved growing pains. The cluster teacher experienced challenges in working with the two teachers she supported who at first felt that she was “stealing their job.” She had difficulty getting her suggestions accepted. Neither CTT teacher had the expertise in autism that she had, and they were defensive and closed to her ideas. The strained



relationship inhibited free sharing of strategies that the cluster teacher had learned from other schools.

Meanwhile, teachers at the same grade level frequently supported one another despite a culture not always friendly to collaboration, a sharing aided by close proximity of AMP classrooms. Clinicians took advantage of the team teaching structure to collaborate with one teacher while the other attended to the class.

#### **7.5.4 Team Meetings**

Team meetings were challenging in the first year. On the Network Director's suggestion, the principal decided to "be the adult in the room." She set clear expectations and played a stronger role at meetings. The principal shared this leadership by asking the cluster teacher to facilitate meetings and became the process observer. She brought in team building exercises to develop group process skills and to put issues in the context of group dynamics instead of taking them personally.

The team came to recognize the value of team meetings. The principal valued the sharing of many perspectives and ownership for problem solving through team meetings. The meeting structure evolved over time as more classrooms and grade levels were added. The team began to meet as a whole for business and professional development, and then divided into sub-teams to discuss progress of individual students.

#### **7.5.5 Outside Observations**

As with Washington Elementary, some AMP members were concerned at first with being observed so frequently, but eventually "a fishbowl culture became the norm." Members gained comfort in knowing they were not alone when resolving a challenge.

Support from the network tapered off over time, as is customary when schools become accustomed to the model, but the team learned that it could call on consultants from the network when members needed particular kinds of help. As was the case in Washington Elementary, school members at Lincoln Elementary adapted the model to the school's context while maintaining fidelity to its core intentions. Some members were pleased with this kind of empowerment; others wished for more guidance and concrete prescriptive advice.

#### **7.5.6 Knowledge Transfer Within and Across Schools**

The principal expanded aspects of the AMP model throughout the school. She used and modeled the AMP strategies as she supervised classrooms and led the school. For example, she used the "five point scale" during assemblies to communicate to

all the children what voice volume she expected at any time. As a result, AMP team members have changed the way they teach and interact. The principal also leveraged AMP to improve interaction with the principal and members of the special education school that shares her building.

Some AMP team members and other non-AMP staff resisted the kind of collaboration that AMP demands. However, a cluster teacher pointed out, “the whole school is moving towards collaboration, so you don’t have a choice.” The spreading value of collaboration began to permeate many aspects of teaching at Lincoln Elementary.

The network used Lincoln Elementary as a model for schools that were new members of the network. Other school leaders and teachers have visited to learn what AMP looks like in practice. Likewise, Lincoln staff have visited other schools where they have learned new ideas and built relationships across the network. For example, the cluster teachers of both Washington and Lincoln Elementary have collaborated on a handbook for cluster teachers.

### **7.5.7 Parent-School Relationships**

While one would expect some discontent from families uncomfortable with their children in a new classroom setting, no children had been pulled out of the programs by parents due to discontent at the time of this research. The social worker had done an exceptional job as liaison between the school and parents—keeping parents informed and protecting teachers who could otherwise become overwhelmed. She paid attention when support was needed. She also connected with Washington Elementary as a “buddy school” to facilitate shared monthly parent support meetings run by both schools.

---

## **7.6 Common Principles: Tailored Practice**

Schools tailored a common model for children with ASD to the unique context of their schools.

Collaborative features of the AMP model resulted in new professional development models that were more integrated with experimentation and change in daily work. As members worked on daily practices, they found ways to change structures, processes, leadership behaviors, and ultimately the school culture to improve their collaboration and coordination. Schools were expected to collaborate internally, with other schools, and with the support network.

Highlights of the learning of Washington and Lincoln Elementary—as well as the two others, Jefferson and Adams Elementary introduced at the beginning of Sect. 7.3—show how participating members learned through collaboration, how knowledge was shared within and across schools, and how this learning was supported by the broader network.

### 7.6.1 Shared Leadership

For both schools, leadership made a difference for the ability of schools to successfully implement the AMP model. The Director of AMP looked for principals who were highly committed to AMP and who were naturally collaborative, supportive of their staff, and willing to be “the adult in the room.”

Leadership varied among schools. At Washington and Jefferson Elementary schools, principals may not have had the content or process expertise to support their teams in implementation, but other school-based leaders took up the role or were identified—the speech therapist at Washington Elementary and the vice principal of Jefferson Elementary respectively. Teams in both of these schools also assumed responsibility—under the process leadership of the speech therapist or vice principal, respectively—for their own work of implementation. Both teams expected to make critical decisions. Each team had a strong process facilitator during team meetings.

The principal of Lincoln Elementary was not only committed to the AMP implementation process, but she was also deeply connected to the philosophical underpinnings that drove AMP. This principal was primarily concerned with building an inclusive environment within the whole school. Her commitment to content, as well as process, was evidenced by her modeling of AMP guidelines throughout the school. She also identified other leaders for the school’s implementation, in particular, the social worker and cluster teacher. The cluster teacher provided process leadership for the AMP team during and between team meetings. The social worker provided leadership to the school as a whole by sharing coordination tasks. These three women worked as a team to provide leadership to the Lincoln Elementary AMP team.

In contrast, the principal of Adams Elementary was not a strong leader for AMP. Further, no one individual or group emerged or was appointed to take on the needed leadership role. While team members at Adams Elementary shared the same roles as did other schools—e.g., facilitator, agenda keeper, note taker, time keeper—each of the other schools had one person who observed team process and intervened, when necessary, to ensure good group dynamics. But, this leadership role was not filled at Adams Elementary.

### 7.6.2 Collaborative Team Teaching

All four of the schools implemented collaborative team teaching similarly. Effective teaching pairs in all the schools learned to: develop trust, rely on each other’s strengths, give and receive critical feedback, and make critical decisions about which support network suggestions to implement and how. Ineffective teaching pairs frequently had incompatible personalities, were not both committed to AMP, or found it difficult to let go of their own ideas.

The schools incorporated similar supports to sustain teaching pairs over time. They became better at choosing effective pairs—discovering that team teaching

pairs were more likely to be effective if teachers were able to choose or state a preference for their partnering teacher.

Each school's leadership team discussed ineffective teaching teams with the director of AMP on a monthly basis and considered interventions. Some schools brought in other support network members to intervene with challenged relationships since their external status allowed for conversations that were more difficult for internal leaders.

### **7.6.3 Informal Support**

Team members across all schools found informal ways to communicate regularly. They ate lunch together so they could keep up to date. They signaled one another, as team members passed each other in the hallway, through notes passed in special places in the classroom, via emails and Facebook, and, once in a while, at happy hour.

Cluster teachers across schools had fewer opportunities for informal teaming, so they made the most of time they had with other teachers in the classroom. They discussed new AMP social development curricula and strategies for specific children through notes in mailboxes, before and after class times, and when passing in the hallway. Thus, cluster teachers often became the vehicles for knowledge sharing outside the boundaries of AMP classrooms and teams.

Except for Washington Elementary, all schools found that informal teaming fell short when AMP individuals felt uncomfortable with one another. In Jefferson Elementary, for example, team members felt vulnerable when a well-intentioned use of video for self and group critique was delivered without enough emotional cushioning. Discomfort had consequences; in particular, it inhibited knowledge sharing. At Adams Elementary, a clinician felt the team was cliquish. Informal collaboration at Washington Elementary, by contrast, reflected the comfort team members had in relying on one another for help in problem solving and resolving challenges.

### **7.6.4 Team Meetings**

Each of the schools took a different path in the evolution of its team meetings. Each school decided to break up into smaller groups during the case consultation time when the program grew by adding classes and staff, but each school's goal in changing the structure was distinctive. Lincoln Elementary's rationale was access to full dialogue and all the team's voices. Jefferson Elementary's rationale was knowledge sharing. Adams Elementary focused on specific classroom needs. Washington Elementary sub-divided to address case consultation, but over time, it reversed its decision and brought case consultation back to the full group, with a clear schedule of who was to be discussed. The rationale for this was that, when the

team was broken up, there was not enough access to diverse perspectives and knowledge bases.

Leadership was critical for the effectiveness of meetings. Washington, Lincoln, and Jefferson Elementary schools each identified key leaders for team meetings. These leaders provided continuity between meetings, ensured that accountability measures were being followed (e.g., attendance, or gathering information from families when their child was to be discussed), and acted as process observers to address team and individual dynamics.

### **7.6.5 Knowledge Transfer Within Schools**

Cluster teachers were the primary purveyors of knowledge across AMP boundaries within each school. They, more than other team members, let go of conventional ideas of the role and process of teaching by inviting other teachers to share territory and craft. Thus, their inclusion in the selection of collaborative partners proved to be an important practice. Both speech and language, and occupational, therapists found that their expertise was understood and utilized by other team members, and as a group, they felt valued within AMP teams.

Engaged principals who demonstrated in different ways that they valued the implementation of AMP—through modeling or practices, participation in team meetings, and/or use of resources—were key to knowledge transfer within and across schools.

The degree to which the principal of a school was on board also impacted the ease and success that the support network had in the school. At Jefferson Elementary, for example, the principal at first defended staff who were not implementing the program as advised. The program director threatened to pull the program out of the school. In order to avoid this fate and the isolation that might return to the school, the principal shifted the culture through support from the vice principal. Together with the AMP team, the school began to appreciate the support network's honest assessment and feedback.

The principal of Washington Elementary might not have fully understood the ways in which AMP guidelines support student learning, but he did understand the level of impact that implementation of AMP had on his school as a transformational change process. The support network recognized that he was fully committed to its implementation. Moreover, the lead speech therapist at Washington Elementary understood the “why” of implementation and filled in this gap.

The principal of Adams Elementary appeared committed to implementation prior to and during the first year. She attended frequent principal meetings and attended professional development workshops. By the second year of implementation, her attention had shifted. The school's overwhelming scheduling difficulties greatly impacted the support network's ability to schedule observations and support with classrooms.

Across the four schools, the principal of Lincoln Elementary had the most developed relationship with the support network. She was an advocate of the model and was frequently asked to speak about it to new principals.

### **7.6.6 Knowledge Transfer Across Schools**

Principals who showed interest in AMP were invited to meet with current AMP principals. Schools continued to collaborate with one other—through member-to-member relationship building during AMP-wide principal meetings, professional development courses, discipline-specific meetings, and school visits.

The network has facilitated cross-school sharing by bringing together individuals with content and process expertise. Individual content and process leaders—i.e., those who have established themselves as knowledgeable, experienced, or well versed in the process of implementation—have been identified and helped to expand their work outside of the boundaries of their own school for the benefit of expanding implementation of the model. They might, for example, collaborate with one other on a resource for all cluster teachers, support network consultants during knowledge sharing meetings, or co-teach a professional development course.

Valued discipline-specific meetings have been held about every 6 months for all speech therapists and social workers. Speech therapists have learned much informally from counterparts in other schools, as have social workers.

### **7.6.7 Parent-School Relationships**

Parent-school relationships illustrate ways that the model involves the broader community of relationships as a bridge from school to other aspects of a student's development. The AMP director was clear about the importance of the role of parents in her ability to sustain AMP and its funding over time. The AMP model provided the school with clear guidelines as to how parents were to be supported.

Parent-School relationships were comparable across these four schools. As the AMP model prescribed, schools provided monthly support for interested parents. Communication was expected daily between classrooms and families. The social worker within each school acted as the primary liaison between the family and the AMP team that provides services for their child.

Each school negotiated other resources with families. At Washington Elementary, the team invited families to the school and provided access to their children's teachers. Teachers at Jefferson Elementary noted whether they had spoken to families about their specific concerns before discussing the student at a team meeting case conference.

Overall, team members felt pride in the positive comments coming from parents about their work and their students' successes.

### 7.6.8 Climate and Culture

Across the four schools, AMP members have described the culture of the district within which the schools are situated as “a vacuum,” “isolating,” preferring “autonomy,” and not comfortable with a team approach. In contrast, the culture of AMP is one of transparency, openness, and responsibility. The AMP model invites a “fishbowl” culture within which team members share observations, critique, feedback, and praise. Members across the schools came to value the AMP model of team-focused learning and implementation within the “fishbowl”. However, the transition to this new culture was challenging.

The Washington Elementary team fell quickly into AMP’s culture. They learned to rely on one other, in part because of leadership challenges at the top. Lincoln International also moved easily into the AMP culture. The principal was deeply invested in AMP’s guideposts and principles and frequently modeled their application.

At Jefferson Elementary, after the network threatened to pull the model, the principal helped the school to shift from a culture that protected professionals from critique and outside judgment to a culture much more open to external influence, support, and evaluation. While the transformation was swift, it was also painful and required the removal of a few team members.

Adams Elementary team members spoke positively of the open collaboration and transparency that AMP affords. However, given scheduling and multiple priorities, they did not fully assimilate the AMP culture—making things difficult for individual AMP members.

While each of the schools took a different path towards inclusion of the AMP culture, individuals and teams took a more similar path. In general, members across the schools experienced difficulty, discomfort, and vulnerability in opening themselves up to scrutiny and ongoing observation. Individual team members learned to trust one other. They also learned that they had to take responsibility for implementation. They better understood that the model was incomplete without the contextualized intentional decisions for implementation made by teams and individuals at each school. They learned to value the transparency, openness, and collaborative nature of AMP, as well to be empowered by the responsibility given to them and the teams.

---

## 7.7 Summing Up

AMP is built on the following important assumptions—that:

- Specific interventions are particularly effective for students who have ASD—e.g., social development intervention curriculum, visual supports, behavioral approaches

- Everyone—e.g., classroom teachers, general education teachers in cluster classrooms, clinicians, parents—working with students needs to learn how to use these interventions
- Everyone implementing interventions should share knowledge of student progress and the effectiveness of the intervention with everyone else on the team
- Gathering this knowledge through collaborative processes—e.g., team meetings, clinician meetings—allows teams and schools to better respond to student needs
- These specific collaborative processes are essential and are to be implemented and supported in order to sustain structures for learning
- Local learning in the local context—e.g., the classroom, the school—is invaluable to making adjustments to the model to ensure effectiveness at the local level
- Valuing local learning in the local context requires flexible and individualized school support.

The implementation of these assumptions required restructuring and adjustments by schools. Schools had to:

- Implement new processes for collaboration and knowledge sharing—e.g., team meetings, supporting informal collaboration, speech and social work meetings
- Support new professional development requirements for their staff—e.g., pre-service, ongoing, in the moment
- Rearrange roles (e.g., leadership), bring on new positions (e.g., cluster teacher) and institute new on-going approaches to engage with parents (e.g., monthly meetings)
- Merge the assumptions brought by AMP into the every-day workings of the school.

This chapter has compared how four schools implementing AMP have assimilated these assumptions through learning and knowledge sharing within the schools, across the schools and between the schools and the support network. Assumptions of effective implementation take the form of specific ways of working with content and process developed by the support network and refined by the schools. These ways of working included: leadership, team meetings, collaboration through team teaching, informal support, outside observations and support from the network, knowledge transfer within and across schools, and parent-school relationships.

The awareness by the support network and the schools of what was needed for successful implementation facilitated the learning necessary for the model to be sustained at each school and throughout the system. Over time the support network and schools learned what was needed to grow the AMP model within schools and contributed to the support network's collective expertise and knowledge across schools.



## 7.8 System Dynamics: Our Model

Schools joined the AMP network because of their need to help increasing numbers of children with ASD. Each school faced other unique challenges. The schools in this study—that varied in student populations, size, and communities they served—signed on to AMP in part because the program promised additional resources, professional development support and guidance from the network. They did not realize that adopting AMP would address broader school challenges and in effect shift the school culture strongly toward collaboration, learning and knowledge sharing.

Learning to implement AMP required adherence to a common set of underlying principles. At the same time, schools were encouraged to tailor implementation of these principles to the unique features and context of their schools.

The schools' commitment to the AMP vision and way of working required supportive leaders, who in turn, either became advocates for the program or supported other leaders in the school who took on leadership roles. Leaders in some schools modeled the principles and practices of AMP in ways that led to school-wide learning and change. Cultures became open and collaborative.

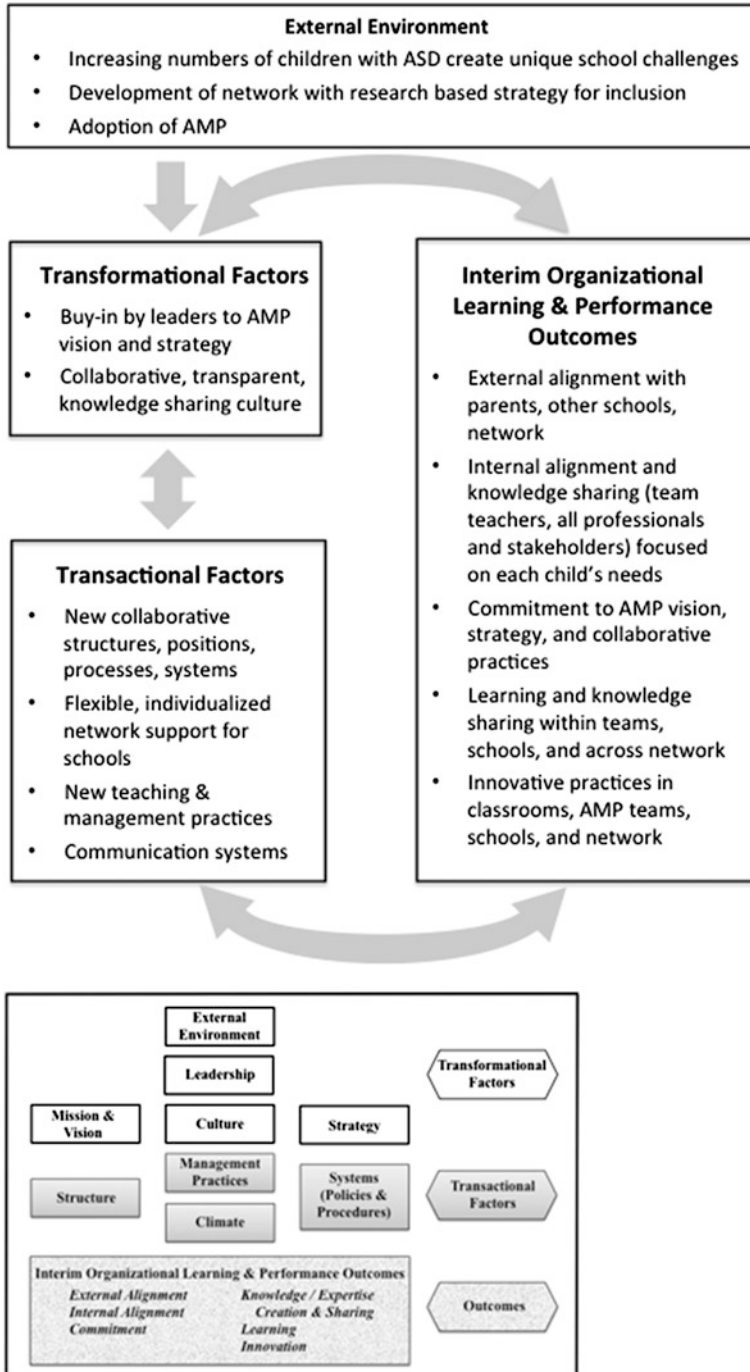
Many transactional structures, processes, systems and practices needed to be implemented. New structures for supporting students through AMP included, for example, team teaching, the use of cluster teachers, integrated work with various professionals, and new practices such as social development interventions.

While guidelines and support were provided for implementation, the heart of the model was day-to-day experimentation and learning coupled with collaborative problem solving, feedback, and knowledge sharing. Team members and administrators learned by doing, and as they gained new insight into how to do things well, their expertise was tapped by others—in their schools, by other schools in the network, and by network support consultants who found ways for new local knowledge to be shared and showcased across the network.

A fishbowl climate and culture—with constructive criticism shared visibly—was challenging at first but ultimately welcome as an antidote to isolation. Likewise, open discussion and sharing at team meetings became valued although team members had to learn how to share and integrate diverse, and sometimes opposing, views.

Day-to-day management practices—in classrooms and team meetings, as well as through interaction with parents, other professionals, and network members—created a climate of learning and knowledge sharing. Changes required a good deal of coordination, communication, and information sharing to maintain internal and external alignment with multiple stakeholders.

Figure 7.3 summarizes key system dynamics in the AMP school network case that reflect our model, *Strategic Leverage Through Learning*®.



**Fig. 7.3** Key system dynamics in AMP case with schematic of our model (Fig. 2.1) included for comparison

## References

- Brownell, M. T., & Walther-Thomas, C. (2002). An interview with Dr. Marilyn Friend. *Intervention in School and Clinic, 37*(4), 223.
- Centers for Disease Control and Prevention. (2007). *Press release: CDC releases new data on autism spectrum disorders (ASDs) from multiple communities in the United States*. Retrieved March 25, 2007, from <http://www.cdc.gov/od/oc/media/pressrel/2007/r070208.htm>
- Centers for Disease Control and Prevention. (2009). *Prevalence of autism spectrum disorders: Autism and developmental disabilities monitoring network, United States, 2006*. Morbidity and Mortality Weekly Report (Vol. 58, pp. 1–20). Washington, DC: Centers for Disease Control and Prevention.
- Cohen, S. (2006). *Targeting autism: What we know, don't know, and can do to help young children with Autism spectrum disorders*. Berkeley, CA: University of California Press.
- Crimmins, D., Farrell, A. F., Smith, P. W., & Bailey, A. (2007). *Positive strategies for students with behavior problems*. Baltimore: Paul H. Brookes Publishing Co.
- Friend, M. (2000). Myths and misunderstandings about professional collaboration. *Remedial and Special Education, 21*(3), 130.
- Friend, M. (2007). The coteaching partnership. *Educational Leadership, 64*(5), 48.
- Friend, M., & Pope, K. L. (2005). Creating schools in which all students can succeed. *Kappa Delta Pi, 41*(2), 56–61.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Gutstein, S. E., & Sheely, R. K. (2002). *Relationship development intervention with young children: Social and emotional development activities for Asperger syndrome, autism, PDD and NID*. Philadelphia: Jessica Kingsley Publishers.
- Kabler, M. L., & Carlton, G. R. (1982). Educating exceptional students: A comprehensive team approach. *Theory into Practice, 21*(2), 88–96.
- Kucharczyk, S. (2011). *Implementation of an educational model for children with autism: Organizational learning and knowledge sharing within schools, across schools and between schools and the support network*. Dissertation, Teachers College, Columbia University. 3492911.
- Leithwood, K. (Ed.). (2000). *Understanding schools as intelligent systems*. Stamford, CT: JAI.
- Leithwood, K., & Louis, K. S. (Eds.). (1998). *Organizational learning in schools*. Lisse, Netherlands: Swets & Zeitlinger.
- Leithwood, K., Mascal, B., Strauss, T., Sacks, R., Memon, N., & Yashkina, A. (2007). *Distributing leadership to make schools smarter*. Toronto: University of Toronto, OISE.
- National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.

---

## 8.1 Overview

In this chapter we describe how inter-agency collaboratives designed and delivered comprehensive, integrated services to substance-abusing welfare mothers as part of a national welfare-to-work demonstration project, CASAWORKS for Families.

CASAWORKS for Families was a national demonstration project that was implemented in ten sites across the country to develop, refine, and pilot test a multi-faceted, intervention strategy designed to meet the needs of women who were welfare recipients and who abused addictive substances (Woolis et al. 2001). The mission of CASAWORKS for Families was to help women on welfare with substance abuse problems achieve and maintain recovery, employment, family safety and quality parenting. The CASAWORKS model was predicated on the integration of substance abuse treatment, job training, and other core services; the provision of simultaneous rather than sequential services; a single point of service planning; and the use of a community-based collaborative service delivery structure.

In theory, a single agency could have provided all of the services in a fully integrated program. Unless this happened, the capacity to design and deliver comprehensive, customized services for CASAWORKS for Families women required collaboration among internal units within an agency and among different partner agencies. Effective collaboration was critical at the service delivery level. Effective collaboration was often needed at the management level as well, for example, when service delivery staff could not overcome barriers or modify policies and procedures that stood in the way of successful integration of services. Such collaboration was typically achieved through partnerships among different agencies.

CASA (The National Center on Addiction and Substance Abuse at Columbia University) identified a lead agency in each of the ten sites, whose responsibility it was to hire and house the local CASAWORKS staff and to build an inter-agency collaborative that would take responsibility for identifying, and/or designing, and

delivering comprehensive, integrated services to CASAWORKS clients. Although the principles of the CASAWORKS model were specified, each collaborative was expected to tailor the model to the needs of its clients and community. CASAWORKS clients were expected to receive individualized, customized services from a team of direct service staff who were to work together to develop a multi-disciplinary treatment plan.

### **8.1.1 Assessment of Organizational Capacity and Learning for Collaboration and Service Delivery**

It was expected that implementing the CASAWORKS model successfully would require significant capacity-building and learning for most sites in the project. As a result, CASA commissioned M. GEPHART ASSOCIATES LLC to assess organizational capacity and learning at the sites.<sup>1</sup> The research we undertook assessed the extent to which—and the processes through which—sites developed the capacity to design and deliver integrated services effectively for clients. Early evidence supporting the efficacy of the CASAWORKS model was encouraging, but it was also clear from the data that sites varied in the extent to which they produced positive results for clients. Site differences in client outcomes underscored the importance of building and assessing capacity for customizing and integrating services.

We studied the organizational learning that occurred over several years as the ten inter-agency collaboratives designed and delivered comprehensive, integrated services to substance abusing welfare mothers. We then developed measures to assess the organizational capacity and learning of the sites.

We assessed the learning and knowledge management processes through which agencies and staff at the sites built capacity for collaboration and integration in the delivery of services. We focused on how organizational capacity was being acquired, developed, and shared within and across sites. We looked for evidence that agencies and staff were:

- Learning to solve problems related to delivering services together effectively and to remove organizational barriers to the effective delivery of such services
- Sharing information and reflecting on their problem solving and learning in ways that facilitated change in systems that enhanced capacity building within and across sites

We assessed capacity building and organizational learning using a customized version of *Strategic Leverage through Learning*<sup>©</sup>. We assessed whether and how systems and processes were being implemented and used in ways that led to

---

<sup>1</sup>M. GEPHART ASSOCIATES LLC, Organizational Learning and Capacity Building Evaluation of CASAWORKS for Families, 1998–2001.

organizational learning and capacity building. We looked at the thinking behind which systems and processes were selected, whether staff were learning from them, and whether their use was leading to effective collaboration.

From our visits to the sites, we learned that they varied considerably in:

- Their models and approaches to delivering integrated services and to developing collaboration among partner agencies
- The structure of their collaboratives, especially in the centrality of the lead agency and the number of agencies/units that were consistently involved in the partnership
- The extent to which services were co-located
- The nature and quality of treatment services and employment available at each site.

---

## 8.2 Capacities that Sites Needed to Develop

From a cross-site analysis of data collected during the site visits, we identified capacities underlying the diverse models and approaches, which contributed to integrated delivery of comprehensive services and effective partner collaboration. We also identified and defined effective system dynamics. We mapped these capacities and dynamics against our constructs and measures from *Strategic Leverage Through Learning*<sup>©</sup>. We created operational definitions of the constructs and measures for a new survey-based instrument for CASAWORKS, *Assessing Organizational Capacity and Learning for Collaboration and Service Delivery*<sup>©</sup>.<sup>2</sup>

The starting point for customizing and integrating services was the set of goals in each woman's personal plan. Customized, integrated services were needed to meet these goals. Staff from different backgrounds and agencies needed to consider and integrate different perspectives and work together effectively in order to design and deliver the program. The capacity for collaboration needed to customize and integrate services had to be learned. Staff and partners learned as they worked together to identify and solve problems, reflect on action, plan, and design or modify services. Although there was an overarching vision and plan for CASAWORKS, sites were invited to experiment with a set of services that met the unique needs of clients in each site.

Organizational Learning was learning that became shared and used by the collaborative at each site. As an outcome, such learning was evident in the accumulation and use of expertise and knowledge built by the project. As a process, organizational learning was evident in the mechanisms that staff and partners used, individually and collectively to learn from their experience in order to improve

---

<sup>2</sup>The CASAWORKS version of the instrument— *Assessing Organizational Capacity and Learning for Collaboration and Service Delivery* —was copyrighted in 2000 to M. GEPHART ASSOCIATES LLC.

integrated service delivery, partner collaboration, and their own capability to work together as a project team.

We identified organizational learning processes and capacities for organizational learning in:

- The planning process itself: degree and manner of engagement and empowerment that characterized this process, as well as processes that were set up as a result of it
- Development of staff skills in new areas around collaboration and integration
- New lateral work processes for communication and problem solving
- Mechanisms for managing those processes within and across organizational boundaries
- Systems for informal learning
- Use of knowledge management system for capturing, accessing, and utilizing knowledge to address challenges
- Norms and practices for collaboration and integration, and ways in which they were rewarded and supported

Using the constructs and causal logic of our model—and building upon previous measurement work in assessments of organizational capacity-in-action for learning and performance in diverse organizations—we developed and piloted a *customized* survey-based instrument to assess organizational capacities and learning in the CASAWORKS demonstration sites.

In a subsequent phase, an independent agency administered the customized instrument to staff in each of the demonstration sites. We analyzed the results to (1) validate our constructs and measures, and (2) provide a detailed understanding of the systems, processes and practices that specific sites were putting into place. Our survey-based assessment helped us to understand which mixes worked under different conditions, what patterns existed, and the relationships of those patterns to client outcomes.

A starting point for programs was to ensure that adequate services were in place, i.e., that they were available, accessible, of high quality, and appropriate to the population they served. Treatment services could be residential or outpatient (see Table 8.1).

Once adequate services were in place, capacities needed to be developed for three different categories of people involved in designing and delivering services:

- Direct service staff who met the needs of women participating in the program
- Partners that collaborated to design, deliver, and evaluate services provided
- CASAWORKS staff

**Table 8.1** Adequacy of services in place needed to provide comprehensive, customized, integrated services

Type of service	Needs to be met through CASAWORKS program
Substance abuse treatment options	Available and accessible to meet the range of CASAWORKS clients' needs given their drug(s) of choice, readiness for treatment, severity of addiction, stage in recovery, and readiness for work
Training and employment services	Available and accessible to help clients: (a) learn about work and employment, (b) become motivated to work, (c) acquire additional education and/or job training, (d) plan for work, (e) increase their readiness for work, and (f) be placed in jobs if they are ready for work
Welfare policies, practices, and services	Are as effective as possible for CASAWORKS clients
Other needed services	Available and accessible to meet other needs of clients in the site e.g., parenting, domestic violence, mental health.
Processes needed in program	In place to: (a) monitor the effectiveness of these services, both separately and as an integrated package; (b) build a knowledge base about how others are mixing treatment and training; (c) identify and share solutions that seem to work; (d) try out new practices and services; and (e) implement appropriate changes in service components and program design

Capacities in all three groups involved internal and external alignment:

- Direct service staff had to get the knowledge, skills and resources they needed; build close relationships with other agencies; and keep up with changing policies and procedures regarding issues that affected CASAWORKS women
- Direct service staff also needed to integrate different perspectives and work across agencies and units
- Partner agencies in the collaboratives needed to be aligned internally—which they often achieved through structures and communication designed to ensure that partners had needed expertise and could make decisions effectively
- Partner agencies needed to be aligned externally as well—which they did by using their professional and social relationships, their access to policy makers, and their understanding of the local labor market for the benefit of the CASAWORKS program

When agencies in the collaborative were aligned, partners could bridge and work through differences among agencies in: (a) values underlying different perspectives, (b) ways of operating, and (c) goals, regulations and procedures that made integrated service delivery difficult.

Performance was high when partners and direct service staff were optimally aligned, particularly when:

- Partner agencies and units could bridge and work through differences among agencies



- Direct service staff could integrate perspectives and work across agencies and units

See Table 8.2 for a detailed list of capacities that direct service staff, partners, and the CASAWORKS project and staff (who were hired to implement the initiative) needed to develop to be effective.

---

## 8.3 Successful Sites

Below we describe the three out of ten sites that were assessed as successful based on client outcomes. What did sites look like that were successful in developing the organizational capacity to implement the CASAWORKS model effectively? Was there a “model” for success? Three of the ten sites fit these criteria for success. While they were similar in some ways, there was “no one right way.” The successful sites varied considerably at the beginning of the project and they developed diverse models and approaches to delivering integrated services and to developing collaboration among partner agencies. See Table 8.3 for client characteristics at successful sites.

### 8.3.1 Site A

The collaborative in Site A was a flexible group of partners with agencies/units and people becoming more or less involved as circumstances warranted. Some services were co-located, with many provided at other locations. Partners in the collaborative were a mix of internal units in the lead agency and external agencies not part of the lead agency. The lead agency was responsible for making and implementing most decisions for the CASAWORKS Program.

### 8.3.2 Site B

The collaborative in Site B was a large, inclusive group of agencies/units and people who were consistently involved. Some services were co-located, with many provided at other locations. Most of the partners in the collaborative were external agencies. The lead agency was responsible for making and implementing decisions for the CASAWORKS Program, while consulting with partners at key junctures.

### 8.3.3 Site C

The collaborative in Site C was a large, inclusive group of agencies/units and people who were consistently involved. Most services were co-located, with a

**Table 8.2** Capacities for integrated service delivery, effective partner collaboration, and effective CASAWORKS staff

Integrated service delivery capacities	Effective partner collaboration capacities	Effective CASAWORKS staff capacities
Systems in place helped to identify, integrate and deliver needed services	The right partners (agencies and people) were actively involved in the collaborative	Mechanisms put in place by CASAWORKS staff ensured accessibility to, and sharing of, needed information to design and deliver comprehensive, integrated services
Mechanisms enabled work with welfare agencies to modify/interpret rules and regulations to accommodate treatment and training when clients moved from welfare to work	Collectively, agencies in the collaborative had the expertise and service capacity to meet client needs and advocate for them. The dominant coalition included treatment, employment and welfare agencies. The number of partners was less important than their effectiveness in working together to identify and meet client needs	CASAWORKS staff effectively facilitated decision-making and problem solving by direct service staff around client problems, issues and needs; and assisted them to work effectively across functions, boundaries, and professional perspectives in providing and integrating services
Mechanisms enabled sharing information about client needs and progress, eliciting different viewpoints, ensuring common goals for shared clients, trying new ways to work with clients, and finding solutions to pressing problems	Agencies were: <ul style="list-style-type: none"> <li>• Respected for internal and external effectiveness</li> <li>• Able to identify, agree on, and commit to achieving common goals and strategies</li> </ul>	CASAWORKS staff assisted partners in collaboration and problem solving to: <ul style="list-style-type: none"> <li>• Understand issues clients faced, deploy resources, and solve problems</li> <li>• Identify and negotiate common and conflicting interests</li> <li>• Reframe problems that resisted solution</li> <li>• Learn from their work together how to develop effective systems for collaboration</li> </ul>
All or most services were co-located or effectively coordinated and integrated through intensive case management	People and agencies in the collaborative could effectively access outside resources to meet goals and needs	CASAWORKS staff’s background and organization reflected the right kinds and mixes of expertise and prior experience—which were recognized and utilized
Clients received follow through in scheduling and keeping appointments, receiving services, proactively identifying and addressing problems, and ensuring that they did not fall through the cracks when problems or setbacks arose	People “at the table” could speak for their agencies and make decisions on their behalf; were respected for professional and agency expertise; and could develop good relationships, consider alternative views, and recognize/respect diversity in partners	CASAWORKS staff developed effective work practices and relationships; clarified responsibilities although they often worked together to meet goals; had the authority and power they needed; and effectively communicated and coordinated work

(continued)

**Table 8.2** (continued)

Integrated service delivery capacities	Effective partner collaboration capacities	Effective CASAWORKS staff capacities
Mechanisms enabled staff to learn from experience and develop new ideas, work processes and practices in response to diverse, changing client needs	Collaboratives learned which agencies, services, and people were needed for CASAWORKS to be effective by identifying and involving appropriate partners, services and people	CASAWORKS staff increased knowledge and expertise through work; used mechanisms that facilitated learning; identified and addressed knowledge gaps; used challenges to develop systems for addressing similar challenges in the future; and were innovative
	Partners collaborated effectively in setting priorities, advocating for clients at the policy level, and in planning, designing and delivering integrated services	
	Partners were effective in decision making and joint problem solving; were able to involve key partners at important times; and followed through on commitments	
	Partners openly discussed and worked through important differences based on beliefs, agency practices, or deeply held stereotypes about the client group	
	Partners built knowledge and expertise as they participated with one another in project activities and professional roles	

few provided at other locations. Most of the partners in the collaborative were external agencies. The lead agency and the welfare partner were more actively involved in the collaborative than other partners. At the same time, a large number of partners from other agencies were regularly involved in meetings and decisions.

**Table 8.3** Client characteristics at successful sites

Site\Variable	Race/ Ethnicity	Average age (in years)	Average years of education	Drug(s) of choice • Primary (1) • Secondary (2)	Employed 10+ days at baseline in past 30 days
Site A	77 % White 33 % Black	32.6	10.8	• Methamphetamine with alcohol (1) • Cocaine with marijuana (2)	None reported out of 42 clients
Site B	85 % Black 15 % White	34.7	11.6	• Cocaine (1) • Alcohol (2)	Four reported out of 65 clients
Site C	68 % White 22 % Black 11 % Native American	31	11.4	• Alcohol (1) • Marijuana (2)	Four reported out of 68 clients

## 8.4 Capacities of the Successful Sites

### 8.4.1 Problems and Adequacy of Services in Place

#### 8.4.1.1 Site A

At baseline, site A had the third highest severity of alcohol and drug problems, and the third highest severity of employment problems.

In our baseline assessment, site A had the highest number of areas of service in place. It was second among the sites in the adequacy of treatment services and above the site mean in the adequacy of employment and training services.

#### 8.4.1.2 Site B

At baseline, site B had the highest severity of alcohol and drug problems and the second highest severity of employment problems.

In our baseline assessment, site B was third in the adequacy of treatment services and second in the adequacy of employment and training services, mental health services, and domestic violence services.

#### 8.4.1.3 Site C

At baseline, site C had the lowest severity of alcohol and drug problems and the highest severity of employment problems.

In our baseline assessment, site C was second in the number of areas of service, above the site mean in the adequacy of treatment services and in the adequacy of employment and training services, and at the top in the adequacy of domestic violence services.

### **8.4.2 Integrated Service Delivery**

The three successful sites shared many areas of strength in the capacities of their CASAWORKS programs for effective delivery of integrated services. In each of the sites, direct service staff worked together effectively and had the expertise, perspectives, contacts, and information needed to solve problems and make good decisions.

In sites A and B, direct service staff were able to get the knowledge, skills and resources they needed; to build relationships with other agencies; and to keep up with changing policies and procedures regarding issues that affected CASAWORKS women. As they worked together, direct service staff in sites A and B were effective in integrating different perspectives and in integrating work across agencies and units. These capacities were enhanced in Site A by the direct service staff's capacity to learn from their experience, to use solutions to prevent problems from recurring, and to discuss the beliefs and values underlying different views. In Site B, the capacities were supported by the commitment of direct service staff to the program and the clients, and their ability to establish relationships and access information and resources outside of the collaborative.

### **8.4.3 Effective Partner Collaboration**

Effective partner collaboration was an area of strength in all three of the successful sites. Site A's capacities for effective partner collaboration included adequate expertise among the partners, the capacity for effective decision-making, and the availability and smooth flow of knowledge and information about the program and the agencies among partners in the collaborative. Partners in site B were strongly committed to the goals and strategy of the CASAWORKS program. Knowledge and information about the program and the agencies flowed smoothly among partners in the collaborative. These capacities in sites A and B enabled the partners to bridge and work through differences in values underlying different perspectives; in ways of operating in different agencies and units; and in goals, regulations, and procedures that might be barriers to designing, delivering, and integrating services effectively.

Partners in sites B and C used their learning to develop shared goals. They became familiar with the needs of CASAWORKS women and learned about the quality and effectiveness of services. They sought and found solutions to problems that prevented them from recurring. Partners in both sites used their professional and social relationships, their access to policy makers, and their understanding of the local labor market for the benefit of the CASAWORKS program. Partners in site C were innovative in response to challenges—such as finding new ways to keep women engaged; identifying what was not working and then identifying new services; experimenting with ways to help CASAWORKS women manage transitions and with ways to engage employers. Partner collaboration in all three sites enhanced the effectiveness of integrated service delivery.

---

### **8.4.4 The CASAWORKS Organization/Staff**

The capacities of the CASAWORKS Organization and Staff in all three of the successful sites supported their programs' effective delivery of integrated services and partner collaboration. The capacity to be innovative was important in all three sites. The capacity to learn was critical in sites A and B. The commitment of the staff in site B was also important. In sites B and C, the capacity of the CASAWORKS Organization and Staff to establish effective relationships and access information and resources outside the collaborative was critical.

As a result of these capacities, CASAWORKS staff in these three sites were able to find new solutions and help direct service staff think in new ways when faced with difficult problems and challenges. Systems were put in place to learn about the effectiveness of services and to use insights from problem solving to establish effective practices and policies for the project. Staff in these three sites were able to anticipate and plan for the emerging needs of CASAWORKS women. Low turnover among leaders and key CASAWORKS staff in all three sites contributed to the effectiveness of their CASAWORKS programs.

---

## **8.5 How Successful Sites Developed Needed Capacities**

### **8.5.1 Site A**

The Project Coordinator in Site A had been doing counseling in the treatment agency that became the lead agency in that site. She and a colleague decided to apply for the CASAWORKS grant because their clients needed additional services to transition from treatment to having a functioning home. When she became the Project Coordinator at the site, she had pre-existing relationships with many of the key partners. Systems for CASAWORKS were put in place quickly because the partnering agencies had a history of working together to coordinate services.

The treatment agency had an outstanding reputation. There was a tight labor market, but it was a low wage market. Partners worked to enable clients to get training and jobs that could support them and health care.

A year after the CASAWORKS program was established in Site A, all service components were in place. The Project Coordinator assessed the quality of services continuously and pursued relationships with alternative providers when problems developed that could not be resolved through discussion and problem solving. Conflicts and problems were managed on a case-by-case basis, mostly offline.

The high retention rate for clients at the site was due to intensive case management at the beginning of the relationship that was slowly reduced as the clients moved forward in their recovery process. Case managers had daily contact with the clients. They scheduled office visits and transportation to needed services. This was possible because most clients were either residents at the treatment center or attended intensive outpatient therapy.

The employment and training components provided job training and placement services, with the goal of placement within 1 year. Support was also available for up to 4 years of education for CASAWORKS clients. The case manager and each client developed an individualized training and employment plan, depending on needs and goals. There were job opportunities and they had a good success rate in job placement. Other services included parenting training and workshops, groups for children, housing, and domestic violence services.

### **8.5.2 Site B**

The leaders and staff of the CASAWORKS Program in Site B were strongly committed to the mission of the program. An important strength of the program at this site was a shared vision that was clear and powerful enough to guide action and help resolve conflicting priorities. There was no turnover among key staff at the site. Although the severity of alcohol and drug problems, days of inadequate housing, and childcare problems were highest at this site, there was a big drop in these problems 6 months after clients entered the program, and a big increase in the number of days paid for work in the past 30 days.

Organizational capacity and learning outcomes were very high at Site B when we conducted our baseline assessment. Service delivery staff, partners, and the CASAWORKS organization and staff were all aligned externally. Service delivery staff could get the knowledge, skills and resources that they needed. They built close relationships with other agencies and kept up with changing policies and procedures that affected CASAWORKS women. Partners in the collaborative were quite effective in using their professional and social relationships, their access to policy makers and their understanding of the local labor market for the benefit of CASAWORKS clients. CASAWORKS staff supported and assisted service staff and partners in establishing effective links with others. Direct service staff worked effectively across agencies and integrated their diverse perspectives. Partners were also able to work together effectively to bridge and work through differences across agencies. Since most of the partners were external agencies, and many of the services were not co-located, external and internal alignment were critical to the success of this site. The strong commitment of service delivery staff, partners, and CASAWORKS staff to the mission, goals and strategy of CASAWORKS enabled the program to overcome the high levels of problems that clients at the site had when they entered the program.

### **8.5.3 Site C**

Site C had the lowest severity of drug and alcohol problems at baseline and the highest severity of employment problems. The site had the third highest number of problems at baseline, but there was a big drop after 6 months. The site ranked

second in the number of services at baseline, and first in the number of services after 6 months.

The strongest partners in the site were the lead agency and the welfare agency. Caseworkers were DHS (welfare) employees rather than CASAWORKS staff as in the other sites. The employment partner was one of the most effective in CASAWORKS, and the job developer was very talented.

The collaborative in site C was a major strength. Partners met frequently and were actively involved in assessing and improving the quality of services. The collaborative was quite innovative in responding to challenges. Differences were discussed and worked through in ways that best served the clients.

External alignment of the collaborative and of the CASAWORKS organization and staff were both high, as was innovation of the collaborative and of the CASAWORKS organization and staff. Innovation was supported by learning of the collaborative and by its commitment to the mission, strategy, and goals of the CASAWORKS program. Service delivery staff worked together effectively as in the other successful sites.

The effectiveness of the welfare office was a major strength of the site. A DHS (welfare) caseworker was able to solve transportation problems for clients by providing bicycles for them.

After 6 months in the program, 70 % of the clients had not used alcohol or drugs in the past 30 days, and the site ranked third in days paid in the past 30 days.

---

## **8.6 Unsuccessful Sites**

What about the three sites that were least successful in developing the organizational capacity to implement the CASAWORKS model effectively and whose clients had poor employment outcomes? Three of the ten sites fit these criteria. See Table 8.4 for client characteristics at unsuccessful sites.

### **8.6.1 Site D**

The collaborative in Site D was a flexible group of partners with agencies/units and people becoming more or less involved as circumstances warranted. Most services were co-located, with a few provided at other locations. Partners in the collaborative were a mix of internal units in the lead agency and external agencies. The lead agency was responsible for making and implementing most decisions for the CASAWORKS Program.

### **8.6.2 Site E**

The collaborative in Site E was composed of a small, regular group of partners. Most services were co-located, with a few provided at other locations. Partners in



**Table 8.4** Client characteristics at unsuccessful sites

Site\Variable	Race/Ethnicity	Average age (in years)	Average years education	Drug(s) of choice • Primary (1) • Secondary (2)	Employed 10+ days at baseline in past 30 days
Site D	67 % Black 27 % Puerto Rican 6 % White	33.6	10.4	• Cocaine (1) • Alcohol (2)	Two reported out of 60 clients
Site E	94 % White 4 % Black 2 % Hispanic-Mexican	31.7	10.8	• Alcohol (1) • Marijuana (2)	One reported out of 54 clients
Site F	61 % White 18 % Hispanic-Mexican 6 % Black 6 % Native American 4 % Puerto Rican 6 % Unknown	32.7	11.3	• Meth-amphetamine (1) • Alcohol (2)	Two reported out of 40 clients

the collaborative were a mix of internal units in the lead agency and external agencies. The lead agency was responsible for making and implementing most decisions for the CASAWORKS Program.

### 8.6.3 Site F

The collaborative in Site F was composed of a flexible group of partners with agencies/units and people becoming more or less involved as circumstances warranted. Some services were co-located, with many provided at other locations. Partners in the collaborative were a mix of internal units in the lead agency and external agencies. The lead agency was responsible for making and implementing most decisions for the CASAWORKS Program.

### 8.6.4 Factors Contributing to Lack of Success in Sites

Turnover among CASAWORKS staff was high in each of the three unsuccessful sites. In two of the sites (D and E), treatment services were not adequate. In site D, employment and training services were not adequate. Other services were adequate in Site E and in Site F. But organizational problems, conflict among divisions in the lead agency, and high levels of turnover among CASAWORKS staff prevented the sites from developing the customized, integrated services that the CASAWORKS model required.

Neither service delivery staff nor partners were able to work together effectively. The CASAWORKS organization and staff were not effective, and the lead agency support for CASAWORKS was not adequate. Information and knowledge systems were weak, and the climate for trust and openness in groups was low. As a result, internal and external alignment, learning and innovation were low in these sites.

The remaining four sites were able to develop some of the capacities needed for CASAWORKS, but they were not able to put all of the pieces in place. Services were inadequate, and client outcomes were poor.

---

## **8.7 How the Sites Did**

Data from client outcomes (collected by the Treatment Research Institute) present the following picture.

Sites whose clients had a moderately high number of problem areas at baseline were able to identify/develop and deliver more areas of service for their clients than sites whose clients had few problem areas. Sites that were successful in addressing their clients' housing, childcare, and transportation problems had the best employment outcomes, provided their clients made progress in reducing their alcohol and drug use during the 6 months after they began the program.

### **8.7.1 What Predicted Client Outcomes**

1. Client assessments at each site included a measure of the number of different areas in which services were being received. We considered the site-level measures of mean number of services received by clients 30 days after they entered the program as a measure of the implementation of the CASAWORKS model. In sites where respondents to our survey indicated that partners in their collaborative had demonstrated more learning, clients, on average received services in a greater number of areas.
2. We developed measures of utilization of services from responses of a few knowledgeable respondents in each site. In sites where CASAWORKS clients made greater use of treatment services in the area, respondents to our survey indicated that the CASAWORKS organization and staff had been more innovative than in sites where clients made less use of treatment services in the area. In sites where CASAWORKS clients made greater use of employment and training services in the area, responses to our survey indicated higher levels of internal alignment of the collaborative and of the service delivery staff, commitment of the collaborative and of the service delivery staff, learning of the collaborative and of the service delivery staff, and innovation of the collaborative.
3. Site level measures of most of our organizational capacity and learning outcomes were strongly correlated with the mean number of days for which clients in the site were paid for work during the past 30 days, assessed 7 months after they entered the program.

## **8.8 How Sites Achieved These Outcomes**

Sites achieved these outcomes through effective service delivery and effective collaboration among partners. Organizational capacity and learning in the sites enabled effective service delivery and collaboration among partners.

### **8.8.1 Effective Service Delivery**

Regular meetings to discuss the progress of clients were an essential mechanism for information sharing and problem solving related to client needs and their progress, and for learning—to modify client treatment plans and the way services are coordinated across agencies.

Key leaders needed: to ensure the effective sharing of information to facilitate decision-making and problem solving around client problems, issues, and needs; and to help the group reflect on client experiences and modify how they worked together. The skills and effectiveness of key leaders or others in their teams were critical.

Sites with cultures that promoted experimentation and learning were better able to develop and modify plans.

### **8.8.2 Effective Collaboration Among Partners**

Effective collaboration between the management of service delivery for clients and discussions by partners of policy and systems issues was critical for developing and modifying effective programs at the sites.

Partners needed to understand the issues and problems that arose from the perspectives of their clients. They needed to identify common and conflicting interests so they could negotiate and problem solve about use of resources. Effective project coordinators managed issues and relationships among partners.

In sites where partner collaboration across agencies was effective, there was often a small, dominant coalition of partners committed to ongoing problem solving and management, with additional partners who were more loosely involved. In sites with partners involving many agencies, the organizational complexity of achieving alignment was greater than in sites with one or two agencies with co-located services. In principle, it might be easier to draw on formal relationship ties within single or a few organizations to gain entrée and enable cooperation. However, this could restrict the diversity of views available for solving problems, learning, and especially for challenging assumptions.

Townsend (2008)—drawing on Himmelman’s (1997) Hierarchy of Multi-Organizational Partnerships—points out that “successful collaboration begins with bringing stakeholders together and building relationships. The process continues with coordinating efforts, then cooperating with each other toward common goals and finally collaborating to reach mutual goals.” The three

successful sites in CASAWORKS operated on all of these levels. Despite the greater organizational complexity of working across a large number of partners, these sites were able to achieve better outcomes for the complex needs of CASAWORKS women.

### **8.8.3 Organizational Learning**

Much learning happened through joint problem solving, as when partners were working on issues or reviewing clients and/or finding solutions for their needs. Joint problem framing also occurred, especially when key people could not get beyond strong visions, mental models or norms that made it difficult for them to see the problem or situation in another way. Much learning resulted from increased awareness about what different agencies did and how they functioned. Leaders who facilitated meetings set the tone for much of the organizational learning that occurred around the resolution of issues.

Much tacit knowledge was pulled out during client reviews because people weren't aware of what they knew. This knowledge was often best made explicit through cross-site field visits or discussion of common problems.

### **8.8.4 Organizational Capacity**

The “organizational” strength and effectiveness of key agencies in a site were very important for its success.

Organizational capacity issues within and across agencies affected the ability of a site to develop an effective program. These included:

- Recruitment, selection and retention of talented staff
- Management of relationships with other agencies, employers, policy makers, and advocates
- Day-to-day management behaviors that empowered and supported key staff
- Skills and effectiveness of project coordinators
- A culture that encouraged learning and knowledge sharing
- Structures that did not pose barriers to—and systems that facilitated—communication, problem solving, and learning

The absence of effective leadership and management, a divisive culture, staff turnover, morale problems—all posed major barriers to the development of an effective program.

## 8.9 System Dynamics: Our Model

The successful sites were all at or near the top in the appropriateness and quality of both treatment and employment and training services.

Organizational capacity and learning measures strongly predicted differences across sites in client outcomes. Critical capacities for effective delivery of integrated services and partner collaboration were external alignment, internal alignment, and engagement and commitment. The key predictors of those factors were learning and innovation.

Key transformational and transactional factors that predicted organizational capacity and learning outcomes across sites were:

1. Structure and communication for service delivery: Working together effectively
2. Information and knowledge system (of the CASAWORKS organization and staff, and the collaborative)
3. Vision for the CASAWORKS program
4. Leadership—both process leadership in groups and CASAWORKS program leadership
5. External environment—community support and social capital—and in addition to our factors, employment opportunities for CASAWORKS women
6. Effective management and support for performance and learning

Below we list the outcomes predicted by each of the factors:

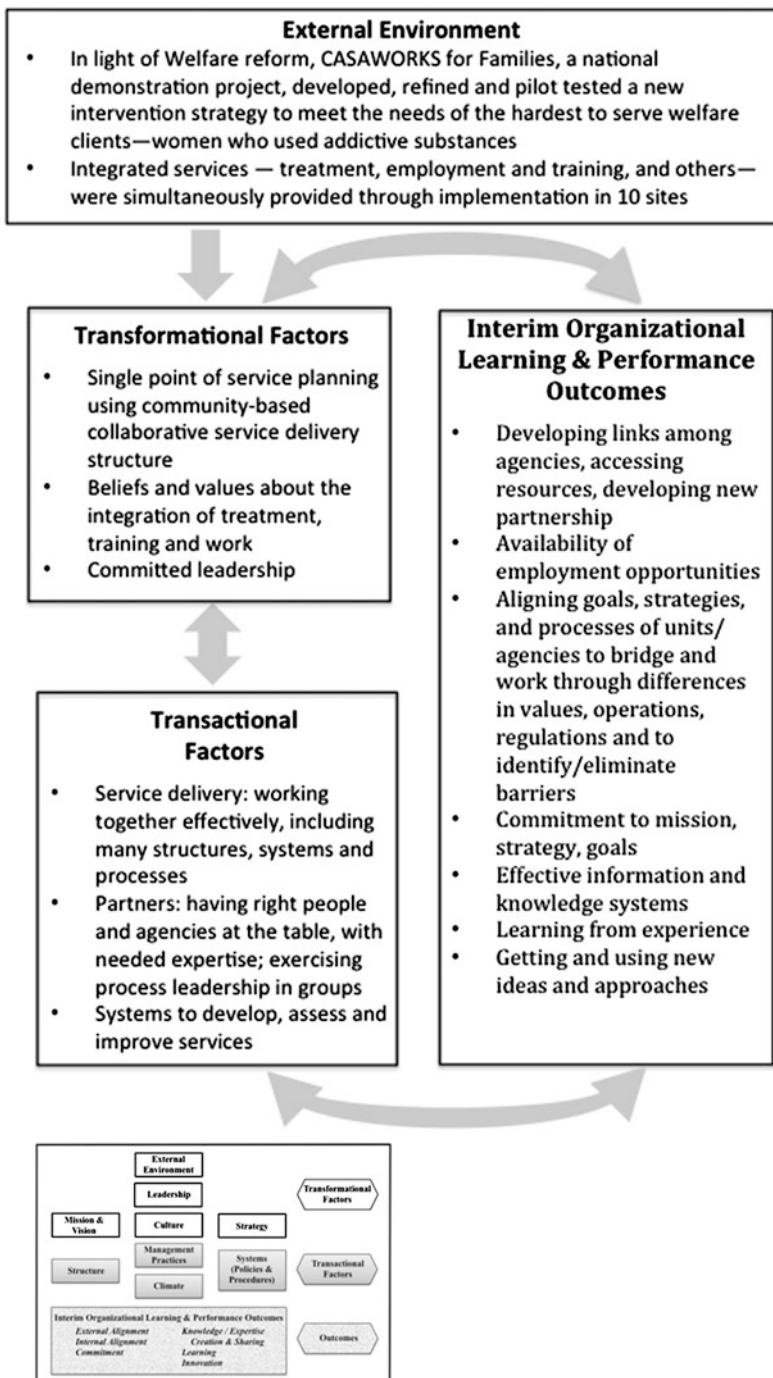
- Structure and Communication for Service Delivery, specifically working together effectively, was a strong predictor for many of the organizational capacity and learning outcomes. In particular, it predicted:
  - Internal alignment (service delivery)
  - Engagement/commitment (service delivery and the CASAWORKS organization and staff)
  - Innovation (collaborative and CASAWORKS)
  - Learning (CASAWORKS and service delivery)
  - External alignment (service delivery, collaborative, and CASAWORKS)
- Information and Knowledge System of the CASAWORKS Organization and Staff, and the Collaborative appeared as strong predictors in many cases:
  - Internal alignment (service delivery and the collaborative)
  - Engagement/commitment (service delivery and the collaborative)
  - Innovation (the CASAWORKS organization and staff)
  - Learning (collaborative)
  - External alignment (service delivery)
- Vision for the CASAWORKS program was a predictor of:
  - Internal alignment (service delivery)
  - Engagement/commitment (collaborative and the CASAWORKS organization and staff)
  - Innovation (collaborative)

- Learning (the CASAWORKS organization and staff), collaborative)
- External alignment (collaborative, the CASAWORKS organization and staff)
- Leadership: Process Leadership in Groups and the CASAWORKS Program Leadership were predictors of:
  - Internal alignment (service delivery and collaborative)
  - Engagement/commitment (collaborative, the CASAWORKS organization and staff)
  - Innovation (collaborative and the CASAWORKS organization and staff)
  - Learning (the CASAWORKS organization and staff), collaborative, service delivery)
- External Environment: Community Support and Social Capital and Employment Opportunities for CASAWORKS Women were predictors of:
  - Internal alignment (collaborative)
  - Engagement/commitment (collaborative)
  - Innovation (collaborative, the CASAWORKS organization and staff)
  - Learning (service delivery, collaborative)
  - External alignment (service delivery, collaborative, the CASAWORKS organization and staff)
- OD/Effectiveness: Effective Management and Support for Performance and Learning were predictors of:
  - Internal alignment (service delivery—work across agencies)
  - Innovation (the CASAWORKS organization and staff)
  - Learning (the CASAWORKS organization and staff)
  - External alignment (collaborative, the CASAWORKS organization and staff)

National demonstration projects assume that components of an intervention are what matter, and that any agency can implement them. By contrast, in CASAWORKS for Families, our results showed that organizational capacity and learning were what mattered, and that many sites could not implement the intervention. Implementing interventions successfully depended on the organizational capacity and learning at the site.

CASAWORKS is one of the rare national demonstration projects that assessed organizational capacity and learning at the sites. The fact that differences across sites are often greater than differences due to components suggests that organizational capacity and learning may be much more important in all kinds of national demonstration projects than has been recognized.

See Fig. 8.1 for a summary of key system dynamics prevalent in CASAWORKS.



**Fig. 8.1** Key system dynamics in CASAWORKS case with schematic of our model (Fig. 2.1) included for comparison

---

## References

- Himmelman, A. T. (1997). Devolution as an experiment in citizen governancy: Multi-organization partnerships and democratic revolutions. Working paper, Fourth annual conference on multi-organizational partnerships and cooperative strategy, Oxford.
- Townsend, S. S. (2008). How judges can build multidisciplinary collaborations to benefit children and families. White paper, Child Welfare Court Improvement Project, originally published in *Future Trends in State Courts* (2007).
- Woolis, D., Nakashian, M., Fox, L., James, S., Gephart, M. A., & Marsick, V. J. (2001). Learning our way through welfare reform. *Policy and Practice of Public Human Services*, 59(2), 28–33.



---

## 9.1 Overview

Through the cases in this book, we have described and illustrated a model of strategic organizational learning and performance that leverages learning by and through system dynamics to improve performance and achieve strategic goals. Some of our examples come directly from work we have done with organizations to better understand and leverage learning as an enabling strategic resource. In other cases, we have used our model to analyze organizational change initiatives using the lens of *Strategic Leverage through Learning*<sup>©</sup> in order to further illustrate how system dynamics were leveraged to help whole systems learn, innovate, and perform. As we noted in the first chapter, we have looked at changes that support use of learning as an enabling strategic resource.

Many of the cases in this book involve learning that supports fundamental shifts in strategy—requiring change in what the organization provides as products or services, and/or differences in who is being reached or served through the strategy. The cases all illustrate what we described in Chap. 2 as a learning approach to change, in which the process of implementing change involves trial and error, is often messy and lengthy, and depends on feedback and continual readjustment (Gephart 1998).

To recap the learning approach to change, clear action plans and roadmaps are seldom in place when organizations innovate. This approach to change requires considerable learning and knowledge sharing by the involved organizational members. The cases all illustrate these kinds of situations—when organizations travel uncharted waters and need to learn their way through the design and implementation of change, creating an ongoing process of transformation. Leaders guide people and the organization toward the vision by encouraging and learning from grassroots initiatives and experimentation. Each step involves learning. Successful practices and processes are iteratively improved, practiced, and shared with others in the organization to build system-level capability. Change is facilitated by

diagnostics and data-based decisions. Frequent checkpoints are set for reviewing progress, adjusting course, and expanding change efforts as progress is made.

All of the cases in this book involve innovation to support new strategic directions. We focus first on four cases—Engineered Woods (Chap. 2), Happy Land (Chap. 4), South Side High School (SSHS) (Chap. 5), and Ericsson (Chap. 6)—that demonstrate how system dynamics were leveraged to achieve desired results *within single organizations*. In the remaining two cases—AMP (Chap. 7) and CASAWORKS (Chap. 8)—we examine system dynamics *in nested systems*, that is, clusters of organizations (schools, social services providers) that are linked together by a common model. In these two cases, an external agency provided a model as well as educational and consulting services to assist in adapting the model to each organizational context. Networks within and across the organizations that adapted the model collaborated, learned together, and shared knowledge in ways that supported the provision of services.

In all but one of these cases, we examine particular patterns of system dynamics when change involved fundamental shifts in strategy. The exception was Happy Land, which did not change its strategy but rather reinforced it with changes prompted by two fatalities that exposed weaknesses that could have undermined its strategy. We look at the interaction between transformational and transactional system dynamics, and the way in which leaders utilized learning and performance outcomes to guide progress toward the strategic vision.

We conclude with insights from research and practice.

---

## 9.2 Spotlight on System Dynamics

### 9.2.1 System Dynamics in the Engineered Woods Case

The key to transforming Engineered Woods from a commodities producer to an innovative specialty products company was organizational learning that built capacity for productization and commercialization. Transformation could not have occurred without active leadership focused on the new vision, external alignment with customers and the market, internal alignment across functional divisions that had previously worked in silos, and commitment of key players to the new vision. The new President used transformational levers to jumpstart change, but he built capacity by employing many different transactional levers.

Innovation was fueled by new ideas that were imported into the organization through people and other search mechanisms. Leonard-Barton (1995) explains that core capabilities are often developed by importing knowledge from outside the organization, that is used in present-oriented shared problem solving or future-oriented experimentation. This pattern was evident in Engineered Woods.

New talent was recruited, often outside the industry, so they could bring in new ideas. New talent in marketing drove the gathering of new information from customers that, in turn, led to a new way of thinking about the kinds of products the company should be creating. The company's President also tapped consultants

to help in developing strategy and in branding. The company often chose to bypass industry consultants who served other commodity providers in order to tap fresh ideas and outside-in thinking.

The new Business Development VP, who eventually became the company's President, adopted a learning approach to strategy development and execution. Trial-and-error experimentation was key to learning how to produce, market, and sell specialty products. Over time, a critical mass of innovators was able to overcome old commodity-based thinking and practices.

"Bridge" people often carried new ideas between manufacturing and sales/marketing through design of experiments and job rotation. The company created positions through which people rotated and shared information; and people moved around in the course of job rotation in ways that accelerated learning.

When new systems and processes were introduced, they were practiced and improved until they worked well and "organizational skills" were developed in their implementation. These new skills became integrated into routines and spread to other parts of the company with the expectation that similar cycles of innovative adaptation would continue. Ideas and effective practices were widely shared through informal systems.

The President reorganized his senior team of leaders and engaged them in experimentation to reach the new stretch goal. Cross-functional product development teams were introduced and became a key mechanism for innovation and knowledge creation/sharing. Product development teams were hand picked to avoid resisters and naysayers. The President led a new product development team himself and was a key presence in new initiatives. Thus, he and his team modeled new approaches to thinking and working.

Early steps often built a foundation for later efforts. For example, the early introduction of design of experiments enabled the first product development team to break new ground in a relatively short period, and this same process was utilized in ways that built organizational skill, making later innovations in products and processes easier to develop and put in place.

Leaders introduced other new processes as needed, and innovated around the platform or in the field at the ground level of operations. The manufacture of new specialized products called for some radically new ways of working, and a lot of on-the-spot problem solving. Six Sigma was learned from elsewhere in the parent organization and adapted to the innovation process. After Action Reviews were undertaken at critical junctures. Much learning was informal, driven by business needs and structures.

New behaviors were identified, hired or cultivated, and rewarded using new measurement systems oriented to market-driven innovation rather than cost saving. Training was used selectively to build new awareness and skills. For example, team building with use of Legos helped employees in different parts of the organization see the consequences of dysfunctional silo'd behavior. Skill training in design of experiments from a sister company shortened the learning curve.

The climate and culture changed as leaders and managers adopted and modeled new ways of working. Symbolic steps were taken, for example, moving R&D to a

new business reporting relationship and creating new space for that function. The company's new building was designed by cutting-edge architects so that it "screamed innovation."

## 9.2.2 System Dynamics in the Happy Land Amusement Park Case

Happy Land Amusement Park illustrates constant interaction between transformational and transactional system dynamics that, at each step of the way, created space for interim learning and performance outcomes. These, in turn, facilitated and improved transformational or transactional dynamics.

Transformation was driven by fatalities that catalyzed change. New talent was brought on board to build a safety culture. The story of the Park involved many new systems and practices that, over time, helped create and reinforce a safety culture.

Overall, change began with a new safety vision and strategy. Park leaders initiated and got behind the safety vision when fatalities occurred, and brought in new talent to make safety a day-to-day reality. Working collaboratively, leaders (old and new) put in place a strong, pervasive safety culture supported by management practices and systems, and modeling by leaders. Ideas were brought in from outside the amusement park; ideas were also generated internally based on data collected through new systems that had been put in place. The result was strong internal and external alignment.

Operationalizing safety and engraining it in the organization's day-to-day practices, climate—and ultimately, its structure and culture—required altering or modifying transactional structures, policies, systems and practices. Many new mechanisms were put in place. Managers changed the way they talked and modeled safety with employees on a day-to-day basis. Data were used frequently, visibly and collaboratively to demonstrate safety gaps and help employees make changes in routines. Lessons learned were culled and incorporated into training of Park employees.

Effective use of transactional dynamics resulted in incremental individual and work group learning, problem solving and experimentation. Innovative work practices and knowledge acquired from the industry that was shared among employees improved internal alignment across departments. Park leaders networked with professional groups and agencies in ways that strengthened links to the external environment. These incremental outcomes led to changes in climate and, over time, transformation of the Park's culture. Ultimately, safety became personal for key leaders in the Park who worked in new ways with employees to transform operational safety at Happy Land Amusement Park. The capstone was company-wide reorganization to ensure maintenance of safety.

### 9.2.3 System Dynamics in the South Side High School Case

The story of South Side High School is one of strong leadership driving many transactional changes toward a transformational vision of high expectations and achievement for *all* students, regardless of race, socio-economic status, or country of origin. Leaders not only set the vision, but they also changed attitudes, beliefs, and skills so that students and parents, teachers, counselors, administrators and support staff embraced the new vision, and changed practices and behavior to institutionalize and sustain it.

Leaders functioned at both transformational and daily transactional levels. Change at SSSH required leaders to put in place new or modified systems and practices to support the goals of de-tracked classrooms and high expectations for all students. Collaboration and shared work planning fostered internal alignment and enabled teachers to share knowledge and expertise rather than remain isolated in their classrooms.

Leaders monitored classroom practices, held teachers and other professionals accountable for supporting the vision, held the line against relapses to prior beliefs and practices involving tracking, and rewarded those who implemented the new vision. Data were used regularly to ground and inform decision making—whether related to the progress of a particular student, trends for different student groups (i.e., by socio-economic level, race, achievement levels, or academic program), professional development, or school-level policy making. SSSH enacted change over time by experimenting, reflecting on results, and using insights to improve new practices.

Transactional factors, when leveraged, led to improved interim outcomes

- Greater alignment externally with parents and the community
- Greater internal alignment among teachers, counselors and other professionals in the school
- Increased commitment by leaders, teachers, professionals and students
- Learning and knowledge creation and sharing within and across groups of teachers and school professionals
- Innovative teaching and practices.

Improved interim outcomes, in turn, enabled school leaders to build on, and improve, ways of conceptualizing and implementing the Leveling Up strategy and transforming the school's culture. The culture became:

- Data driven: A wide range of disaggregated data were used to motivate, understand root causes, guide teaching and learning, monitor and adjust action
- Achievement oriented: Every student was pushed to meet the highest possible academic standards no matter what their prior experiences and background
- Student centered and learning-based: Differentiated instruction was used to meet individual student learning needs

System dynamics in this case show a pattern of transformational level factors that set direction, followed by transactional dynamics to put systems in place, develop teacher capabilities, work with parents and the community, enroll and support learners, manage schedules, solve problems and address barriers. Data were used constantly and well to explain and drive change—first towards increasing the rate of Regents Diplomas and then, when that goal was being reached, to raise the bar and expand enrollment in the International Baccalaureate program.

### **9.2.4 System Dynamics in Ericsson**

This case describes ways that executive education developed capabilities that helped leaders to drive a new strategy throughout the company. Change began at the transformational level with the CEO's refocused strategy. The company sought to gain external alignment with customers that was lost when product innovation caused Ericsson to get ahead of the market and lose its leading position.

Organizational learning benefitted from new ideas gained through knowledge sharing and different ways of drawing in the “voice” of the customer, suppliers and others outside the organization—thus improving external alignment. Leaders built and leveraged networks that strengthened internal alignment and enhanced innovation in the face of challenges. Leaders used their networks to get information, solve problems, locate expertise and get advice. They worked together to enhance coordination and alignment across boundaries so that goals of different business units, and processes, supported pursuit of the new strategy.

Transactional system dynamics were leveraged in support of the refocused strategy. Through the program, the company took advantage of their consensus culture and their extensive network to leverage system-level learning and improve alignment.

### **9.2.5 System Dynamics in AMP**

The AMP model was designed to meet the needs of children with Autism Spectrum Disorders in inclusive classrooms. The model was implemented by a university-based network. Schools that participated in the program obtained additional resources, support for professional development and guidance from the network. The schools' commitment to the AMP vision and way of working required supportive leadership. Core features of the model were prescribed, but there was flexibility in implementation based on local school context. Many structures, systems and processes were developed and put in place to support the adaptation and implementation of the model in each school.

Collaboration was central to the vision and implementation of the model. Through collaborative team teaching, teachers worked together and collaborated with clinicians in the classroom. Cluster teachers supported learning when students were not in their homeroom. Social development interventions required within-

classroom collaboration between speech/language pathologists and teachers. Weekly team meetings were held for child-specific case conferencing with all key professionals. The AMP network supported every step of implementation. Schools visited one another. The AMP network director met with each school leader at least once a month. Cross-school meetings within disciplines facilitated knowledge sharing.

A transformational vision guided the interventions. The heart of the model was knowledge sharing—among teachers, professionals, leaders, and parents. The many transactional changes that were put in place within and across schools supported internal alignment within the classroom and the school, and external alignment across schools and between schools and the network. A “fishbowl culture” led to norms of transparency and feedback that supported the development of cultures of collaboration and knowledge sharing within and across schools. All schools were encouraged to innovate to implement AMP practices. Support network professionals identified innovative practices and local knowledge, and found ways to get them shared and to harvest new insights and practices to feed back into the model.

### **9.2.6 System Dynamics in CASAWORKS**

CASAWORKS for Families was designed to develop, refine and pilot test a multi-disciplinary intervention strategy to meet the needs of women who were Welfare recipients and abused addictive substances. The CASAWORKS model was predicated on the integration of substance abuse treatment, job training and other core services; the provision of simultaneous rather than sequential services; a single point of service planning; and the use of a community-based collaborative service delivery structure. The vision for the program was transformative because it challenged the dominant view at the time that recovery from substance abuse must precede any job training or employment. Although the principles of the CASAWORKS model were specified, each collaborative was expected to tailor the model to the needs of its clients and community.

Implementing the CASAWORKS model successfully required significant capacity building and learning in the sites. In three out of ten sites that were successful in this demonstration project, collaboratives included a large group of agencies, units and people. Multiple partners had to collaborate effectively within and among different agencies—both at the service delivery and at the management levels. Sites needed to develop the capacity to design and deliver integrated services effectively for their clients.

Adequate services and jobs were available in the successful sites. These sites also needed to develop new ideas, work processes and practices in response to changing client needs. Many of the needed capacities involved alignment within collaboratives and between the collaborative and other agencies, policy makers, and employers. Leadership was important in all three of the successful sites; in two of them, the leader was in the CASAWORKS organization vs. an external partner

agency. Successful sites had a history of collaboration, and demonstrated effective process leadership in groups.

Innovation among partner agencies occurred in response to challenges. It included, for example, new ways to keep women engaged, experimenting to improve the quality of services, and engaging employers in new ways. Innovation among partners was enabled by learning among partners and learning within the CASAWORKS organization itself. Learning of service delivery staff resulted from having or putting structures and communication systems in place so staff could work together effectively. Community support was essential for developing new systems and policies. A shared vision that was conveyed to policy makers was essential for implementing innovative solutions to challenges faced. Learning was most effective when the CASAWORKS staff created information and knowledge systems. The most successful sites had a system-wide commitment to the vision, mission, goals and strategy of CASAWORKS.

---

### **9.3 System Dynamics Patterns**

Cases in this book show ways that system dynamics can be leveraged for strategic organizational learning. They also illustrate an interactive flow between transformational and transactional system dynamics, and learning and performance outcomes.

#### **9.3.1 Direction of Flow When Initiated at the Transformational System Level**

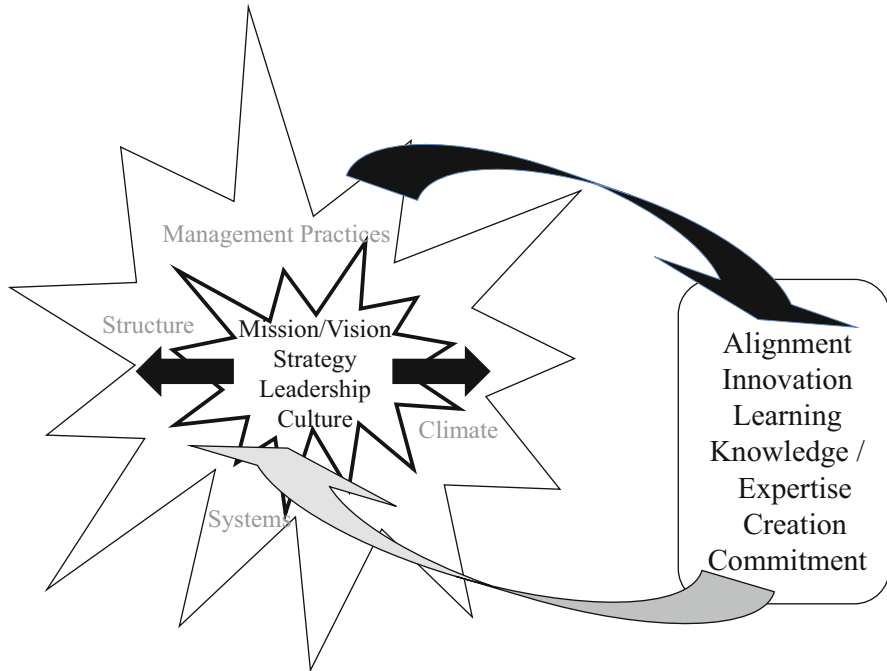
Most of the cases in this book start, in some way, with change at the transformational level.

In some cases—such as Engineered Woods, South Side High School, AMP, and CASAWORKS—both the vision and the strategy themselves were new. In these cases, use of system dynamics started at the transformational level; transactional dynamics were then leveraged in the service of the new transformational vision and strategy. See Fig. 9.1 for a depiction of the direction of this flow.

#### **9.3.2 Direction of Flow When Initiated at the Transactional System Level**

While Happy Land Park's general strategy did not change, fatalities shed light on the fact that safety—a key dimension of the Park's strategy that was central to its success—existed almost exclusively on paper. New or radically revised systems,



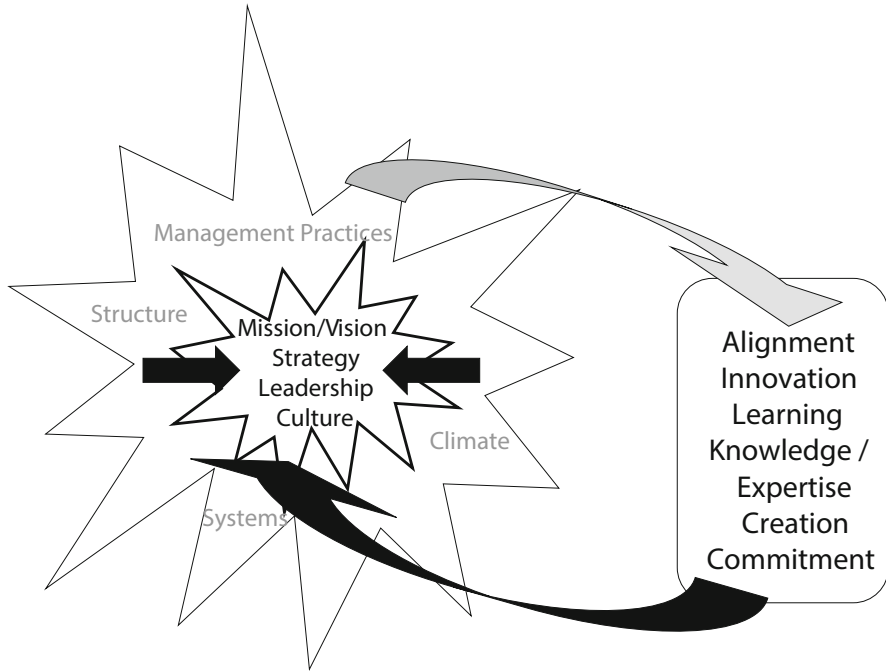


**Fig. 9.1** Flow initiated by transformational system dynamics

policies, mechanisms, procedures—along with dedicated staff who could help Park employees learn and engage safety on a daily basis—were needed for the revitalized strategy to be successful. Thus, much of the work of change in leveraging system dynamics was initiated and implemented at the transactional level. New talent from outside the park, with experience in related process industries, and who had the trust of the Park’s owner and managers, put the right systems, processes, practices, mechanisms, behaviors, and rewards in place, ultimately, to build a strong safety culture. See Fig. 9.2 for a depiction of the direction of this flow.

## 9.4 Cross-Case Dynamics

Tables 9.1 and 9.2 highlight cross-case system dynamics. The cases compared in Table 9.1 are of single organizations. The cases compared in Table 9.2 involved networks or other kinds of nested systems. By looking across the tables, the reader can identify and compare emphasis on different sets of dynamics, working together, to support transformational or transactional change. Transformational factors interact to shape strategic orientation and direction. Transactional factors affect day-to-day systems, management practices and structures to implement the strategy.



**Fig. 9.2** Flow initiated by transactional system dynamics

Feedback from these actions either reinforce or modify the existing culture. Transformational and transactional dynamics are leveraged in ways that lead to external and internal alignment, commitment, knowledge and expertise creation and sharing, group and organizational learning, and innovation. These outcomes, in turn, support progress toward strategic goals.

## 9.5 Insights from Research and Practice

We conclude this chapter with a few insights from research and practice.

Organizational learning is learning *by organizations*, not learning *in* organizations. It is system-level learning *at* the unit, organizational or cross-organizational level, or within communities of practice. There are many definitions of organizational learning. See Table 9.3 for a selected set of definitions. Differences reflect intellectual traditions. The nature of organizational learning depends on the organization dynamics in the organizational or inter-organizational case being examined.

For example, in Happy Land, leaders detected and corrected errors. They did not fundamentally change their strategy; rather they modified or added policies, practices, mechanisms, behaviors, rewards and other organizational factors to

**Table 9.1** Highlights of cross-case system dynamics in Engineered Woods, South Side High School, Happy Land and Ericsson

System dynamics	Engineered Woods	South Side High School	Happy Land	Ericsson
External environmental challenges	Competition and shrinking market for company's key products leading to dramatic shift to specialty products	District superintendent's decision and goals for high achievement for all and narrowing of achievement gap that were consistent with goals of SSHS	Fatality led to realization that the Park was not "safe" as presumed Safety steps taken after fatality insufficient to prevent second fatality	Refocused strategy in late 1990s due to industry downturn, and to company's getting ahead of the market with its technology innovation
Key products and services	Specialty products instead of commodities that had been the company's focus	High track curriculum, heterogeneous grouping with academic supports for all, extra services for at-risk students Differentiated instruction IB curriculum and degree	A theme park with over 50 rides and attractions including a waterpark and ride park Reputation as friendly, clean and attentive to "guest experience"	Leading provider of network infrastructure, managed global services and support solutions
Mission/Vision	Transformation to specialty products—changing company's reputation, branding, customer orientation, and demand	Changing expectations for all students toward excellence and equity	A family-owned business reputed to truly care about its guests and employees A shared vision of safety—central to success—promoted after fatalities occurred	Stated vision: "a Networked Society, where every person and every industry is empowered to reach their full potential"
Strategy	New specialty product development Need to build organizational capacity for "productization"	Stretch goal: 25 % increase in Regents diploma by 2000 Leveling up for <i>all</i> students achieved through: detracking, differentiated instruction, and expanding IB curriculum	Formulation of strategy to ensure safety following "wake up call" after fatalities	Refocused strategy coupled innovation with attention to consumer preferences and operational excellence Pietersen Strategic Learning model adopted to support strategy development and implementation

(continued)

Table 9.1 (continued)

System dynamics	Engineered Woods	South Side High School	Happy Land	Ericsson
Leadership	<p>Driven from top; implemented jointly by senior leadership team who themselves modeled learning and changes</p>	<p>District leadership engagement Hands-on instructional leadership by principal and team Engagement of teacher leaders in redesign of curriculum and Professional Development</p>	<p>Leadership centered on the owner and family members New talent from outside the industry that modeled a different way of leading</p>	<p>Leaders centralized controls and decision making, and set/communicated priorities Executive education and talent management redesigned to drive strategy implementation Critical mass of networked senior leaders internalized vision and aligned strategy across the company</p>
Culture	<p>Culture transformed to support creativity and innovation, as seen in climate of fun, redesigned office space, new dress code, non-hierarchical interaction pattern</p>	<p>Data driven: Disaggregated data used to understand root causes, guide teaching and learning, monitor/adjust action Achievement oriented: every student pushed to meet highest possible academic standards Student centered and learning based: Differentiated instruction to meet individual learning needs</p>	<p>A safety culture built incrementally over time—first by one of original managers, subsequently by new talent with experience outside the industry and contacts in the industry Safety modeled by leaders, put on everyone's mind and agenda</p>	<p>Culture of consensus Culture combined innovation with valuing operational efficiency</p>

<p>Structure</p>	<p>Structures in place to support new product development (e.g., R&amp;D Center and reporting relationships, cross-functional product development teams, liaison between sales/marketing and manufacturing)</p>	<p>Changes made in: master schedules, rules for dropping IB Meetings to review data and plan Common planning periods for teachers Creation of risk team Access to extra classes Shift in teacher administrative responsibilities</p>	<p>New structures created, including Safety and Accident Review Committees. New safety roles created Reorganization of three operational areas into two larger divisions to better support safety after groundwork laid to consolidate gains</p>	<p>New structures put in place to streamline processes and engage new business (e.g., Services) Decentralized business units coordinated through networking</p>
<p>Management practices</p>	<p>Senior leadership team engagement in all aspects of productization President used 7-S framework to guide and adjust changes</p>	<p>Everyone held to vision Frequent communication, modeling, reinforcement of desired outcomes Principal reviewed rosters, drops, teaching practices to ensure heterogeneous classes Principal checked if teachers encouraged drops, monitored teaching and helped teachers who needed it Principal held line against reinstituting tracking; teachers let go after 2 years who did not support strategy Recognition for teachers helping struggling students</p>	<p>Collaborative problem solving by new leaders Constant scanning for, and fixing of, problems Supportive management practices built over time for new employee safety practices All Hands Meetings held, with safety always on the agenda Informal safety discussions at meetings and when accidents occurred Employees held accountable for safety</p>	<p>Common strategy framework, language, tools to drive strategy down in company; cycle was adapted to mid-level strategy implementation</p>

(continued)

Table 9.1 (continued)

System dynamics	Engineered Woods	South Side High School	Happy Land	Ericsson
Systems and processes	Talent driven hiring practices Measures used to report results Changes in performance management, recognition and rewards Customer oriented “pull” marketing system with branding and incentives Consultative selling based on benefits, not price Stage-Gate process Design of experiments	Data driven decision making Meetings to discuss/advance individual students’ progress Shared data to guide instruction, improve progress of individual students, and demonstrate results Teacher led professional development and lesson planning Systems for communication and information with parents, teachers, and counselors Risk team	Communication by “walking around” and informal conversation Off-season reviews to fix larger operational issues Safety procedures codified, including Ride Department Standard Operating Procedures Manual Reporting systems for accidents installed Data shared regularly using new Near Miss reporting system Accident injury patterns documented and reviewed	New systems and processes put in place to support services needs, adapt strategy to local efficiencies, and engage new business Changes made in hiring practices, rewards and recognition to support strategy implementation
Climate	Climate of innovation emphasizing: fun, creativity, informal, relationships, participation, collaboration	Climate of high expectations and acceleration for all, accountability, and widespread data sharing	Climate of psychological safety created based on rewards for safety rather than punishment for noncompliance	Climate of accountability, empowerment, communication, alignment
External alignment	Move to specialty products aligned company with changes in external environment Shift in orientation from distributors to builders	District goals met and exceeded Parents and community engaged using data and feedback, modeling, frequent communication	New ideas brought by talent with industry connections and expertise in heavy industry Scenarios, drills and vendor demonstrations to proactively prepare staff for disasters Reduced insurance premiums due to recognition of preventive practices put in place	Emphasis on customer focus and preferences

<p>Internal alignment</p>	<p>New product development teams/processes put in place to catalyze changes and build new relationships among R&amp;D, sales &amp; marketing, and manufacturing</p>	<p>Behavior shaped by observation, feedback, and recognition/rewards Buy-in gained through shared data, engagement and participation</p>	<p>Managerial collaboration to promote and model new safety policy and practices</p>	<p>Strategy coordination by critical mass of aligned leaders despite barriers</p>
<p>Commitment</p>	<p>Commitment to breakthrough innovation, creativity through new hires and change in culture</p>	<p>Data used to motivate buy in and improve instructional services Reinforcement through management practices that held the line against detracting and for high achievement for all; and resources and support to achieve goals</p>	<p>Commitment through collaborative engagement and joint problem solving with employees Resistance overcome by talking with, and listening to, front line employees, and respecting their knowledge and concerns</p>	<p>Commitment deepened to refocused strategy and key strategic priorities</p>
<p>Knowledge and expertise creation/sharing</p>	<p>Mechanisms included: Training, AARs, team building, benchmarking New ideas brought in by outside talent who shared expertise and solved problems for productization</p>	<p>New teaching and learning practices shaped internally by teachers (who shared knowledge and created teacher led professional development). Collaboration through lesson study Observation, feedback and weekly review of teacher progress</p>	<p>Safety training regularized based on new safety standards Data on accidents and safety collected, analyzed and shared frequently with workers</p>	<p>Knowledge sharing stimulated through executive education Knowledge shared through collaboration and networking throughout the organization</p>

(continued)

Table 9.1 (continued)

System dynamics	Engineered Woods	South Side High School	Happy Land	Ericsson
Organizational learning	<p>Trial-and-error and experimentation led to adoption/adaptation of structures, processes</p> <p>Learned to manufacture new products in one plant and shared with other plants</p>	<p>Mindset changes (unlearning and new learning), driven by collaborative analysis of data and joint problem solving</p> <p>Data based learning and action</p> <p>New teaching/learning practices</p>	<p>Changed worker habits: “think through the job” and how to do it safely before jumping in</p> <p>Trial-and-error, experimentation</p> <p>Changed practices based on industry knowledge, and on benchmarking of other parks’ fatalities</p> <p>Off season period used for reflection, networking, professional development</p>	<p>Networks used to get information, solve problems, locate expertise, coordinate across boundaries</p> <p>Organizational learning supported through common experience, language, tools, and work on real challenges in executive education</p>
Innovation	<p>Innovation as driver and result of transformation</p> <p>Use of new talent to catalyze change</p>	<p>Innovation as driver and result of transformation</p> <p>Teacher led design and delivery of differentiated instruction rather than using off-the-shelf products or services</p>	<p>New ideas by outside talent who changed how things were done and modeled new ways of working and leading</p> <p>Innovation occurred in day-to-day practices and processes</p>	<p>Innovation balanced by discipline and operational efficiencies</p> <p>Generation, sharing and use of new ideas by adapting strategy model for implementation at middle levels</p>



**Table 9.2** Highlights of cross-case system dynamics in AMP and CASAWORKS for Families

Dynamics	AMP	CASAWORKS
External environmental challenges	Highly regulated environment with multiple overlapping systems Increasing number of children with Autism Spectrum Disorders (ASD)—schools not well resourced or designed to meet their needs	Variation by site in: <ul style="list-style-type: none"> <li>• How agencies linked to the community</li> <li>• State of the labor market in each location, including employment opportunities for CASAWORKS women</li> <li>• Local, state and insurance policies and regulations</li> <li>• Effectiveness of Welfare policies for CASAWORKS women</li> <li>• Community support and social capital among agencies</li> <li>• Drug(s) of choice; and adequacy of services available</li> </ul>
Key products and services	AMP model offered research-based model and support network to establish inclusive classrooms (rather than pull out) Core features of model prescribed with tailoring to local context Shared purposes and practices but differed based on context: e.g., location (urban, suburban, rural), resources, public or private or charter, size, local policies	National demonstration project to meet the needs of women on welfare who used addictive substances Services included treatment, employment and training services, and, as available and/or needed, domestic violence, child care, housing and transportation
Mission/Vision	Inclusive model incorporated National Research Council’s (2001) recommendations for autistic children with focus on communication, social instruction, cognitive development, and proactive approach to behavioral challenges in inclusive settings	To help women on welfare with substance abuse problems achieve and maintain recovery, employment, family safety, and quality parenting Shared vision for CASAWORKS varied within collaboratives, among service delivery staff, and among local programs
Strategy	Voluntary, selective participation (by both school and AMP) Demonstrated learning approach to strategy development and execution within and across schools and with network Iterative cycles of sharing/gaining expertise, trying things out, getting feedback and support, and revising what was done	Integration of substance abuse treatment, job training, and other core services; the provision of simultaneous rather than sequential services; a single point of service planning; and the use of a community-based collaborative service delivery structure

(continued)

**Table 9.2** (continued)

Dynamics	AMP	CASAWORKS
Leadership	<p>Leadership modeling of knowledge generation and sharing; highly collaborative Director of AMP committed to schools' ownership of implementation</p> <p>School leaders selection criteria: collaborative, supportive of staff, and willing to be "adult in the room"</p> <p>Leadership differences at each school with principal sometimes assuming strong role, and at other times, sharing leadership</p>	<p>Leadership in core agencies, of the collaborative itself, and within the service delivery team</p> <p>Leadership sometimes shared among the agencies</p> <p>Embodiment and promotion of the vision; collaboration among the agencies; management of day-to-day needs</p>
Culture	<p>Schools (and leaders) held accountable for carrying out the model well or being dropped from program</p> <p>Collaboration with other teachers, professionals and parents central to vision and implementation, in contrast to isolation often found in schools</p> <p>"Fishbowl culture" in which CCT teachers and others always visible</p>	<p>Variation in beliefs and values about the integration of treatment, training and work ("Treatment is training; training is treatment")</p> <p>Variation in beliefs and values about collaboration, and in perceptions of the women and beliefs about what they were able to do</p> <p>Extent to which different professional cultures were bridged and integrated to create a shared understanding that enabled professionals to reconcile differences</p> <p>Evolution of cultures over time with varying effectiveness</p>
Structure	<p>AMP Director meetings with principals; school visits</p> <p>Collaborative team teaching and work with other professionals</p> <p>Cluster teachers (unique to AMP) in art, phys ed, music classes</p> <p>Transdisciplinary collaboration through social development interventions (SDI) held 3–5 periods/week with speech/language pathologist &amp; teacher; central mechanism for within-classroom work together, goal alignment, transdisciplinary negotiation</p> <p>Team meetings once a week for child-specific case conferencing</p> <p>Every step of implementation supported by AMP network, beginning with pre-service PD courses followed by consultation and visits to help with implementation</p> <p>Support groups for various professionals and teachers</p>	<p>Effectiveness of structure at service delivery level, among the partners, and in the local CASAWORKS program</p> <p>Extent to which service delivery staff worked together effectively and overcame barriers</p> <p>Whether or not the right partners were at the table, had the needed expertise, and made decisions effectively</p> <p>Differing structure of collaborative (i.e., one agency, two agencies, broad range of agencies) and varied effectiveness</p>

(continued)

**Table 9.2** (continued)

Dynamics	AMP	CASAWORKS
Management practices	Principal advocacy of vision, modeling of AMP practices, support for staff, participation in team meetings (not always as process leader) Hands-on visits from support network that tapered off over time	Extent to which partners collaborated and had effective relationships with service delivery staff Extent to which CASAWORKS staff facilitated decision making and problem solving for service staff around client issues, problems and needs Case workers critical at all sites Process leadership in groups varied: in formal or informal roles, raising of difficult issues, setting of attainable goals, help for group to work together constructively, and keeping everyone informed of critical issues
Systems and processes	Team meeting central to common vision and sharing views about how to best support each child Strong Professional Development (PD): courses prior to initiation and throughout; on-the-spot PD in meetings and consultation with support network Regular communication with parents/ varied by school, e.g., documentation, shared information, parent support groups Informal communication between teachers and staff	Many different systems put in place, including: <ul style="list-style-type: none"> <li>• Knowledge and information systems</li> <li>• Systems to ensure that needed services were identified or developed, integrated, and delivered effectively</li> <li>• Systems to assess the adequacy of services and to modify them when needed</li> <li>• Systems to track the progress of women over time and to make sure they did not “fall through the cracks”</li> </ul>
Climate	Emphasis on daily teaching and work with children through collaboration, joint problem solving, learning, constructive feedback, openness and transparency	Shared expectations of what was expected, rewarded and supported at the service delivery and partner levels, within the CASAWORKS project, and of women in the program <ul style="list-style-type: none"> <li>• Openness and information sharing</li> <li>• Collaboration and discussion/ resolution of different views</li> <li>• Persistence and goal achievement</li> </ul>

(continued)

**Table 9.2** (continued)

Dynamics	AMP	CASAWORKS
External alignment	<p>Operated within DoE regulations, facilitated by network director and support network</p> <p>Opportunities available to visit/work with network schools</p> <p>Regular discipline-specific cross-school meetings held for speech therapists, social workers, teachers and other AMP staff</p> <p>Regular meetings held between principals and AMP Director</p>	<p>Effectiveness of CASAWORKS staff in explaining program to other agencies; accessing contacts, information and resources for program; and identifying and bringing in new partners</p> <p>Effectiveness of service delivery staff in getting the knowledge, skills and resources they needed to build close relationships with other agencies, and to keep up with changing policies and procedures regarding issues that affected CASAWORKS women</p> <p>Effectiveness of partners in using their professional and social relationships, their access to policy makers, and their understanding of the local labor market for the benefit of the CASAWORKS women</p>
Internal alignment	<p>Support and advocacy of school leaders critical to alignment</p> <p>Integration by CCT teachers of all inputs in classroom by and with other professionals and cluster teachers</p> <p>Cluster teachers as primary purveyors of knowledge across boundaries</p> <p>Central role of speech and language specialists, occupational therapists understood</p>	<p>Effectiveness of service delivery staff in working together, including integrating and/or aligning goals, strategies and processes of different units or agencies; and in assessing the effects of action in one part of the collaborative on other parts</p> <p>Extent to which partners were able to bridge and work through differences in values underlying different perspectives; in ways of operating in different agencies and units; and in goals, regulations and procedures that were barriers to effectively developing, delivering and integrating services</p>
Commitment	<p>Strong commitment needed by principals and key AMP staff (team teachers, cluster teachers, clinicians)</p>	<p>Willingness of CASAWORKS staff, direct service staff and partners to “do what it took” even in the face of difficulties and conflicts; their commitment to mission, strategy and goals</p>

(continued)

**Table 9.2** (continued)

Dynamics	AMP	CASAWORKS
Knowledge and expertise creation/sharing	<p>Knowledge sharing (among teachers, professionals, parents) as heart of AMP model</p> <p>Expertise shared by support network professionals and among teachers and professionals in AMP network</p> <p>Local knowledge intentionally shared through meetings and other events, co-teaching, PD, materials development; and shared knowledge fed back into the AMP model</p>	<p>Extent to which knowledge and information were available about the CASAWORKS program and the agencies involved in the program at each site</p> <p>Extent to which the CASAWORKS staff created information and knowledge systems for the service staff and partners</p> <p>Extent to which information flowed freely among CASAWORKS staff, and between them and other direct service staff</p>
Organizational learning	<p>Intensive learning within schools both working with children and collaborating with one another</p> <p>“Fishbowl culture” replaced isolation and vulnerability with transparency and feedback that supported learning</p> <p>Principal as key facilitator of learning within and across schools</p>	<p>Extent to which groups and systems learned from their own and others’ experience for both problem solving/incremental improvement and fundamental change</p>
Innovation	<p>Innovation, collaboration and knowledge sharing encouraged</p> <p>Innovation required to tailor the model to each school</p>	<p>Extent to which the CASAWORKS programs at each site recognized needs and opportunities for—and were able to get and use—new ideas and approaches to enhance effectiveness. Indicators included finding new ways to keep women engaged, engaging employers in new ways, identifying what was not working, identifying or developing new services, and experimenting with ways to improve the quality of services and with ways to help CASAWORKS women manage transition</p>

ensure they had a robust safety culture in place. By contrast, Engineered Woods transformed its strategy in response to changes in its environment and then used organizational learning to understand changing system dynamics and to align parts of the organization effectively to achieve the new strategy. In the AMP case, schools that adopted this initiative changed many ways in which they worked,

**Table 9.3** Selected definitions of organizational learning

Author(s)	Definition
Argyris and Schön (1978)	Organizational learning is a process of detecting and correcting errors
Daft and Weick (1984)	Organizational learning is knowledge about the interrelationships between the organization's action and the environment
Fiol and Lyles (1985)	Organizational learning means the process of improving actions through better knowledge and understanding
Huber (1991)	An entity learns if, through its processing of information, the range of its potential behaviours is changed
Levitt and March (1988)	Organizations are seen as learning by encoding differences from history into routines that guide behaviour
Miller (1996)	Learning is to be distinguished from decision making. The former increases organizational knowledge, the latter need not. Learning may in fact occur long before, or long after, action is taken.

Source: Adapted from Bontis et al. (2002, p. 439)

including their teaching, systems, and other practices, as they learned to work collaboratively. Much learning occurred within each school. There was knowledge sharing within, between and across schools, and across the network. In both AMP and CASAWORKS, a model and principles were provided to guide implementation, but they were tailored to meet the needs of schools (AMP) and collaboratives (CASAWORKS). The process of developing capacity to implement the model required organizational learning within and across schools, agencies, networks or collaboratives.

The nature of organizational learning varies depending on the setting and the nature of the organizational or inter-organizational context. Weick (1976) has distinguished between loosely and tightly coupled organizational systems.

Schools and health care organizations are frequently loosely coupled. AMP and CASAWORKS were loosely coupled because they involved networks and collaboratives. However, some individual schools within AMP became more tightly coupled as they worked in an integrated way to achieve their vision. South Side High School was loosely coupled, although it became tightly coupled through strong leadership and changes focused on alignment toward a new vision.

Global corporations discussed in this book are tightly coupled around vision and strategy, but loosely coupled around implementation and operations. An example is Ericsson, which was decentralized and networked. Tightly coupled organizations in this book include Engineered Woods—a division of a family-owned business with strong leadership and culture—and Happy Land—with leadership concentrated in the family that owned and operated it.

All organizations learn, for better or for worse. Some organizational learning is intentional. Organizational learning does not require or imply improved or improving performance. But, much practice and research indicate that learning for its own sake often does *not* improve performance. Productive organizational learning that leads to improved performance requires pursuit of goals and measurement to assess

progress. It requires leveraging effective organizational learning and knowledge sharing strategically by, and through, system dynamics to achieve high performance. Learning and knowledge sharing are leveraged through transformational and transactional dynamics—hence our model, *Strategic Leverage through Learning*<sup>©</sup>. Effective change requires both productive organizational learning and leveraging system dynamics. This is the competitive advantage of our model.

In the next chapter, we discuss how organizations can use our model and instruments.

---

## References

- Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.
- Bontis, N., Crossan, M. M., & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. *Journal of Management Studies*, 39(4), 437–469.
- Daft, R., & Weick, K. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9, 284–295.
- Fiol, C., & Lyles, M. (1985). Organizational learning. *Academy of Management Review*, 10(4), 803–813.
- Gephart, M. A. (1998) Implementing high performance work systems: Planned change or an emergent learning process. In R. Toracco (Ed.), *Proceedings of the 1998 Academy of human resource development*, Chicago, Illinois
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, 2, 88–115.
- Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the sources of innovation*. Cambridge, MA: Harvard Business School Press.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology*, 14, 319–340.
- Miller, D. (1996). A preliminary typology of organizational learning: Synthesizing the literature. *Journal of Management*, 22(3), 485–505.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21, 1–9.

---

# Using *Strategic Leverage Through Learning*<sup>©</sup> to Address Organizational Challenges

# 10

---

## 10.1 Overview

In this last chapter, we discuss ways that organizations can use our *Strategic Leverage Through Learning*<sup>©</sup> model to address their organizational challenges.

We start by highlighting the value our approach has brought to organizations with which we have worked using *Strategic Leverage Through Learning*<sup>©</sup>. What is essential to using this model? What are variations in how we have used the model to help leaders and managers leverage system dynamics to improve system-level learning? What accounts for why things work in some settings and contexts, but not in others? We conclude by examining strategies for using our model to implement a learning approach to change.

---

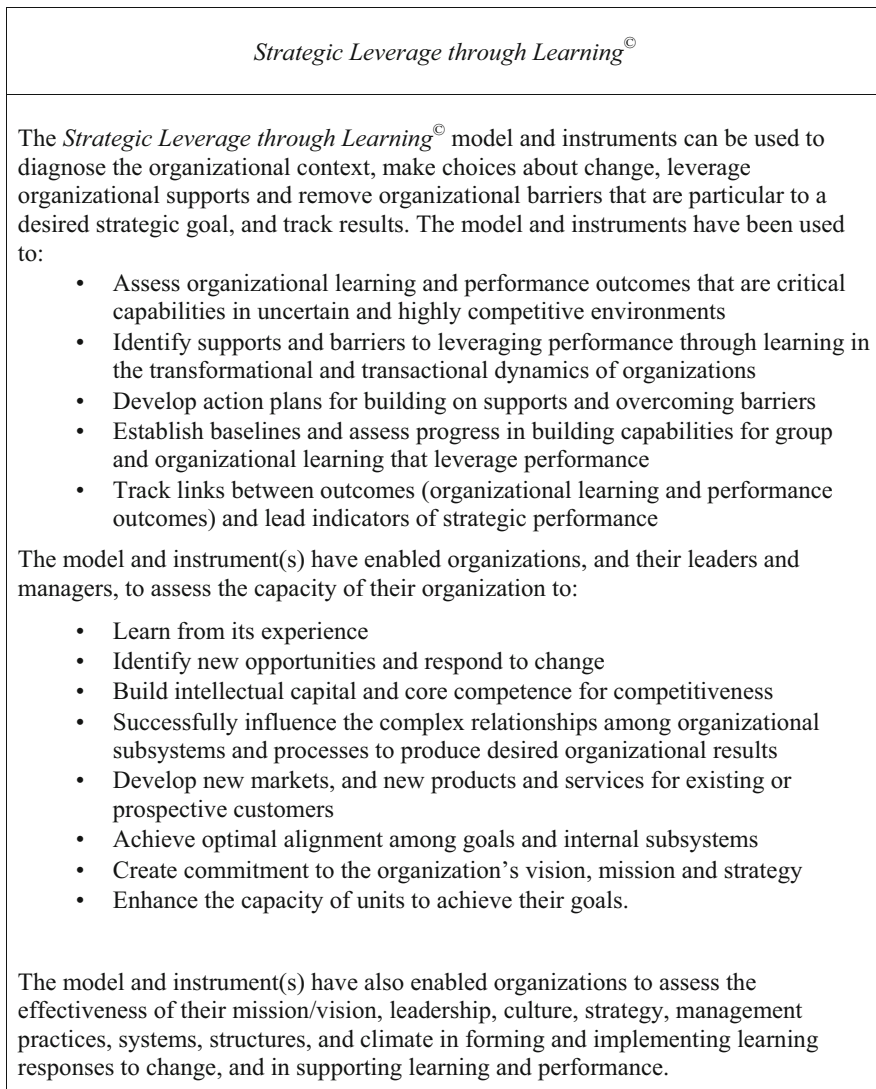
## 10.2 Using Our Model to Get Better Results

Organizations that have used our model have benefitted in different ways, depending on how they have worked with it and with us. They have improved organizational learning and performance outcomes that led to substantial gains in achieving their strategic goals. See Fig. 10.1 for a brief description of the model and how it has been used.

### 10.2.1 Customized Surveys to Design and Support Interventions

One way we have partnered with organizations has been to customize survey tools to support their assessments and interventions. Examples include the Federal Judicial Agency (Chap. 2), a global manufacturing and service company (not a case in this book), and CASAWORKS for Families (Chap. 8). The Judicial Agency was a bankruptcy court. The manufacturing and service company provided goods and services in countries around the globe. CASAWORKS for Families was a





**Fig. 10.1** Using *Strategic Leverage through Learning*® to guide change

national demonstration project in which agencies collaborated to meet the needs of substance-abusing welfare mothers.

In each case, data were gathered at several points in time using our model and instruments. Results helped stakeholders diagnose problems and the broader context. They were able to improve performance and leverage learning through actions and behaviors that enhanced supports and reduced or managed barriers identified by

these surveys. Tracking outcome metrics enabled them to modify solutions and to assess and demonstrate gains from interventions.

For example, a baseline survey conducted in the Federal Judicial Agency revealed problems that contributed to a declining rate of movement of cases through the court following implementation of electronic case filing. Solutions were collaboratively developed and put in place by Information Technology staff working with other employees. Survey data helped them identify what was wrong and use their situated knowledge to generate and implement solutions. A reassessment after 18 months showed that the rate of movement of cases had risen dramatically.

In a second example, we partnered with a global manufacturing and service company that saw networking as a competitive advantage. The company wanted to strengthen networking that grew out of a high potential leadership development program. We observed this company's program for high potentials and talked to selected managers reputed to be expert networkers in different functional areas and geographic locations. Our baseline survey identified successful practices as well as barriers to, and supports for, enhanced networking. Managers throughout the company increased their support for networking. The company used this information to modify the program and to promote practices that greatly improved results. High potential managers increased networking, despite disincentives such as competition and geo-cultural differences, as a result of increased support for networking by their managers. Hence, management support for networking was a critical success factor—in overcoming barriers and building a culture that supported networking.

In a third example—CASAWORKS for Families—we were invited to develop and use validated measures of organizational capacity and learning so that CASAWORKS could identify the role organizational capacity and learning played within and across sites. Data on client outcomes identified three out of ten sites that were successful in achieving their goals. In all three, the organizational capacity and learning measures that we developed and validated predicted client outcomes and identified pathways to success. We have thus developed measures that can be used in inter-organizational projects in which success depends on effective collaboration (Himmelman 1997).

In all three of these examples, our organizational partners collected data at multiple points in time before and after they undertook interventions designed to address challenges in achieving a stated vision, mission and strategy. Results were used to develop interventions that enhanced outcomes and enabled them to achieve strategic goals. *Strategic Leverage Through Learning*® helped them to diagnose the challenge, develop or refine the intervention, and assess results.

## 10.2.2 Understanding What Works and How It Can Be Improved

Other organizations with which we have worked have used our model and instruments to understand what was or was not working in change initiatives

underway. We used this approach when the U.S. Army collaborated with us to improve knowledge management. We also used this approach when we partnered with Ericsson and the Columbia Business School to improve a custom executive education program designed to enhance strategy development and implementation in Ericsson (Chap. 6).

### **10.2.2.1 Ericsson and the Columbia Business School, Executive Education**

In our work with Ericsson and the Columbia Business School, Executive Education, we used our model and surveys to improve ways that executive education programs could support major changes in strategy development and execution at Ericsson. We assessed participants' experiences with strategy development and implementation in the company; conditions, barriers to and supports for using what they learned back on the job; patterns of networking; how the executive education program could be improved; and how Ericsson could better support participants in using what they had learned. We found that the program had helped Ericsson strengthen a common approach to strategy formation and execution worldwide. Through the program, Ericsson developed core leadership capabilities, and cultivated new and extended networks. Our survey work pointed to ways that Ericsson could improve conditions in the company for effective strategy implementation. We identified supports and barriers related to coordination, alignment and change management; ways the program could strengthen leader capabilities and extend networks; and ways the program could increase value for participants and enhance their ability to use what they learned.

### **10.2.2.2 U.S. Army**

We worked with the U.S. Army over several years using customized surveys. The Army had been building a network-centric knowledge management system since the 1990s to support greater agility, flexibility, and knowledge sharing in action. Effective knowledge management paid off in many ways—in saved lives and successful military operations, as well as military and civilian operational efficiencies.

Early “grassroots” Army Networks, Communities and Forums (NCFs) that we studied were developed for various levels of leadership (including company commanders and noncommissioned officers), functional communities with specific needs (such as Armor or Aviation), as well as lawyers, military doctors and health care specialists. Over time, the Army provided greater coordination and support, while also establishing NCFs to further support civilian and war fighting operations. The Army created an enterprise portal, Army Knowledge Online (AKO), that hosted NCFs, and it developed policy and support for a continuum of collaboration through the latter.

The Army worked with the J. M. Huber Institute for Learning in Organizations at Columbia University, Teachers College about the time that the Army began to establish NCFs. They contracted with us to assess collaboration and knowledge sharing in technology-based NCFs. We developed and administered customized

surveys for both users and managers of NCFs. Our assessment created profiles of use in participating NCFs that described how the NCF was functioning and used, and how users achieved outcomes and experienced value.

Our project developed and validated measures of NCF value for users based on their reported experience. Armed with this information, NCFs could improve user outcomes so they could:

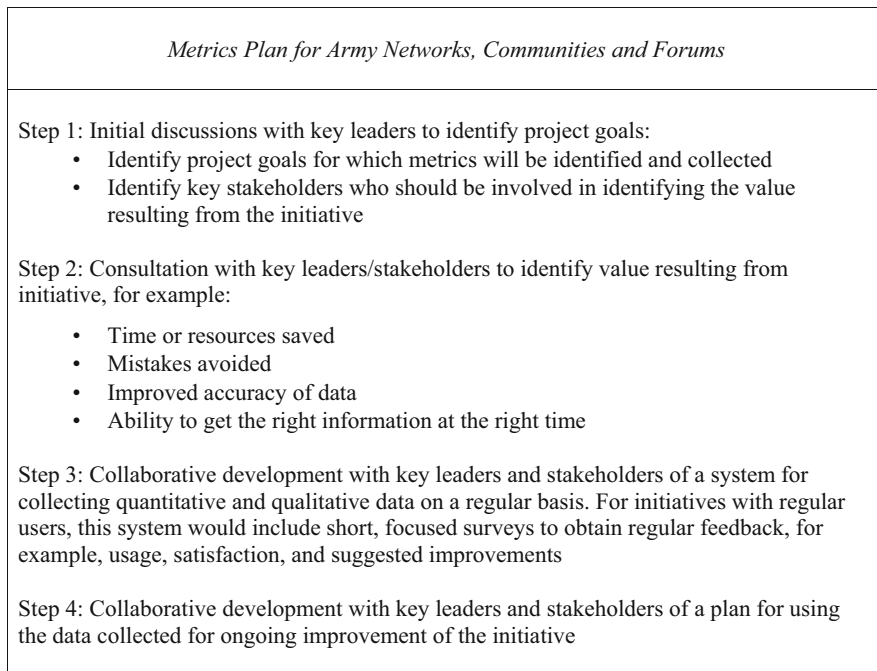
- Recognize needs and opportunities, get and use new ideas, and ask new questions
- Learn from their own and others' experience, use feedback to see what does or doesn't work, make incremental improvements to their work, and reduce the time it takes to learn new ways of working
- Develop new technical skills, improve problem solving skills, improve skills in drawing conclusions from evidence and from applying knowledge in changed circumstances, and develop new ways of framing problems/situations
- Connect with others of like mind/interest, build relationships, become part of the community, and strengthen networks

We also developed a framework and prototype for the development and use of metrics plans (see Fig. 10.2). Such plans include both quantitative and qualitative data. Quantitative metrics are numbers used to track changes in performance between different points in time, and to identify and characterize trends. Qualitative data analyze the context to provide more information about value added. Stories, anecdotes and future scenarios provide understanding of how knowledge sharing and collaboration are leveraged to achieve the value assessed with quantitative metrics.

Our work with the Army led to our further involvement as our partners developed subsequent iterations of networking and community building strategies. The Army created a continuum of collaboration through its networked Battle Command Knowledge System (BCKS). We served on the BCKS Advisory Board. (For more on our work with the U.S. Army, see Gephart et al. 2010.)

Army NCFs have pioneered ways to communicate online to reach their goals. Company Commanders initially located their community on a commercial platform but it was subsequently hosted by West Point (Dixon et al. 2005). With the Army's support, the community has been recognized for sharing knowledge from the field quickly when needed, and ultimately, leading transformation of the way the Army supports leadership development.

Research suggests that people learn more and have greater recall by using stories to communicate information, especially when the knowledge needed is tacit and contextual. With this in mind, Army NCFs innovated "narrative engineering," which they developed and piloted in NCO Net (for noncommissioned officers) using digital stories and face-to-face stories, both supported by a Narrative Wizard.



**Fig. 10.2** Steps in Developing a metrics plan

### 10.2.3 Lessons Learned from Successful Interventions

A third way we have used our model is to analyze learning and performance in successful cases of transformational change. Examples in this book include Engineered Woods (Chap. 3), Happy Land (Chap. 4), South Side High School (Chap. 5) and Autism Model Program (AMP) (Chap. 7).

The leaders of two of these organizations—Bill Goodspeed for Engineered Woods and Carol Burris for South Side High School—have taught their cases in Gephart’s course, *Research on Organizational Learning*. Kathleen Wall and Suzanne Kucharczyk are doctoral graduates of the Adult Learning and Leadership program at Teachers College, Columbia University. They also took Gephart’s course and subsequently presented their cases in it. Both Goodspeed and Burris transformed their organizations based on their own prior knowledge, skill and experience. Wall and Kucharczyk researched their cases as part of their doctoral dissertations.

In all four cases, the authors deepened their understanding of why steps taken worked so well by seeing the intervention through the lens of system dynamics and our framework. The model can thus be used to analyze system dynamics based on existing data without the collection of new data.

### 10.3 Using *Strategic Leverage Through Learning*®

We now return to our discussion of how our model and instruments can be used in organizations, schools, institutions, communities, and other kinds of work-focused systems. Researchers and practitioners have identified practices and strategies that characterize the organization of work, the management of people, and the leveraging of learning in effective organizations (Ashkenaz et al. 2002; Gephart 1995, 1997). The underlying dynamics of learning and performance—and not the mere adoption of particular practices or strategies—are key to success in such systems.

Several underlying principles are common to diverse mixes of practices and strategies. They provide the conceptual and empirical foundations for *Strategic Leverage Through Learning*®. For example, elements in the system should be aligned to work together but not over-aligned in ways that impede innovation and change. Continuous strategic and organizational learning are critical to ensure innovation and responsiveness to the environment.

Translating the lessons learned from successes in building effective organizations requires that the underlying logic be understood and implemented in new settings. The tendency to implement the *manifestations* of effective systems—rather than the processes that *create* them—is commonplace. In other words, managers often seek to put in place particular “best practices” that worked for *other* organizations, but that cannot be adopted wholesale in *their own* organization without understanding the particular organizational context and dynamics at play.

*Strategic Leverage Through Learning*®—a multi-level model of system learning and performance—illustrates the value of diagnosis and intervention using a learning approach to change. We have used the framework to assess and build system-level capabilities needed for learning and performance in uncertain and rapidly changing environments. Customized, diagnostic instruments based on the model have been used to assess group and organizational learning that leverage performance and the organizational dynamics that support learning and performance.

A first step is a careful diagnosis of organizational factors vis-à-vis the challenges faced and the goals to be achieved. Diagnosis helps managers decide on the nature of the interventions to put in place, and guides choices about the key leverage and starting points in the specific context. Since system dynamics are not linear, small interventions in the right place can lead to dramatic changes in system dynamics and improved outcomes. Diagnosis also provides a model or framework that managers can use to make sense of change as they get started. Even when managers begin with a planned change approach, much occurs that was not anticipated, so a learning approach is needed as managers experiment and use metrics to assess results and work with key talent to collectively learn their way through to the goals they wish to achieve.

Diagnosis needs to take into account both performance and learning dynamics. Without focusing on both, little progress can be made in demonstrating how

measures of learning can be used to improve performance or in tracking pathways to performance that involve strategic learning.

Secondly, when the model is used to guide change, different steps adopted along the way are regularly examined for consequences and results they have generated. Questions are asked and conversations had with a variety of stakeholders to better understand how actions taken or initiatives set in motion influenced system dynamics and led to these outcomes. Leaders and other stakeholders can then examine these results and use data-based knowledge to modify approaches or plan next steps.

---

## **10.4 Variations in Using Our Model**

As the examples in the first section of this chapter illustrate, the model and instruments based on it can be used in different ways depending on the purpose: whether they are to be used to guide new interventions, to assess and improve existing interventions, to explore new opportunities, or to extract lessons learned by deepening insight into system dynamics and how they leveraged learning to optimize performance and make progress toward strategic goals.

### **10.4.1 Guiding New Interventions**

If the purpose is to guide new interventions—as was the case in our work with the Federal Judicial Agency, the global manufacturing and service company, and CASAWORKS for Families—the first step is an exploratory phase to understand the organization or system and how different stakeholders currently experience operations that are relevant to the focus of the intervention.

We use this information to make joint decisions with our partners about data collection methods, customization of our instruments, and relevant samples. The partner identifies strategic goals, how they can be measured, and whether metrics exist to do so or need to be created. We can then identify what to look for vis-à-vis our interim outcomes; and which transformational or transactional factors are especially important to success. We can also decide if some areas addressed by our model and instruments are not highly relevant, given goals or the situation at hand. This exploratory phase paves the way for data collection processes, e.g., customizing surveys, crafting additional interview guides, or determining metrics plans.

When new interventions are being launched, a timeline can be set for collecting baseline and reassessment data. As data are collected, we prepare analyses and reports that we use to feed back results and engage in conversations with our partners about implications and next steps.

### 10.4.2 Assessing and Improving Existing Interventions

Many of these steps are also taken when interventions have already begun—such as in our work with the Army and Ericsson—and the purpose of our work together is to understand what is or is not working, and how steps being taken can be further improved to reach goals. Exploratory studies are also undertaken to make sure that we understand the organizational context, problems and challenges, as well as barriers and supports. Data collection typically yields suggestions for improvements from employees and managers. We might, as in the case of the Army, assist in developing and testing measures for value added as a result of the intervention so that the organization can use these in monitoring results.

As we generate and discuss analyses and reports with our organizational partners, we look for solutions that have been suggested by those carrying out the work itself because knowledgeable actors in the situation often understand what could be done to substantially improve outcomes. They often need help in identifying, removing or addressing barriers, as well as in using supports. We also offer suggestions, ideas, and information about other useful practices, as well as relevant contacts we have gained through our research, practice and our networks.

### 10.4.3 Exploring New Opportunities

We have helped a variety of organizations explore new opportunities, for example:

- A global hotel chain that wanted to develop learning centers of excellence by understanding learning and system dynamics in successful hotels
- A consulting group with which we partnered to help a global pharmaceutical company understand leadership development in complex, changing environments

Our approach in these circumstances has been to gather data through interviews, focus groups, and observation. We use our framework to guide the questions we ask; and we analyze responses through the lenses of our model. We seek to understand strategy, mission and vision; what the changing environment is like; how managers and other key stakeholders address the challenges in their environment; what barriers and supports they encounter; and their views about how to change the organization productively.

Our analysis of these challenges has led to a profile of strengths and weaknesses, and identified underlying transformational and transactional factors that enhance or prevent success. By conducting this kind of analysis, organizations can ask new questions and identify steps they can take to change management behaviors that affect work climate and organizational culture. They can change structures, find new talent, utilize employees differently, install new processes or mechanisms to smooth the flow of work, improve communication, motivate employees, better



utilize talent, or enable good practices in one part of the company to be shared elsewhere.

In work that we did with the global hotel chain, for example, strengths in the profile we created of successful hotels showed that successful managers were using organizational system dynamics well—e.g., management practices, systems and processes, rewards and expectations, as well as ways of communicating and helping staff improve performance—to catalyze, embody, and build learning into the property as a system. Work in these properties was often the vehicle for continuous learning and innovation. In this study, data showed that leaders highly valued staff. In turn, staff took extra steps to care well for guests. Metrics were already widely used to prevent problems from recurring. Leadership capabilities and style were well matched to the challenges different properties faced. The culture was strongly customer-oriented but also influenced by the business challenges and local needs of each property.

How could the hotel chain leverage these strengths in helping leaders of less successful sites become learning centers of excellence? Based on our analysis, we identified key questions that less successful property leaders could ask to diagnose system dynamics, alignment, commitment, innovation, learning, and knowledge sharing and expertise creation. We focused in particular on the external and internal environment, perceptions and practices supporting the mission/vision, and ways the property's strategy might need adaptation to enact the mission/vision. Once problems and leverage points are identified, experienced hotel leaders could provide peer learning and support to other leaders in their network who could benefit from their insight and capabilities. Leaders who want help could collect data using our model. They could bring their challenges and diagnoses to workshops where successful leaders could help facilitate peer-supported action learning groups to identify and plan steps to engage in course correction and experiment with change. They could create metrics plans, such as the one we helped Army Network leaders develop. Peer leaders and learning facilitators could follow up through communities of practice to examine results of new interventions and think together about adjustments to an intervention or, if successful, ways to scale up.

The hotel chain study is one example of how organizations can use the model to find ways to spread or accelerate interventions and effective practice. Hence, a final variation in how to use our model is to deepen insight into lessons learned in order to scaffold or scale up for future success.

#### **10.4.4 Using Our Off-the-Shelf Assessment Tool**

We have used our survey-based model and instruments in many different kinds of organizations to diagnose their contexts and system dynamics, and to guide change. As a result, we have validated measures that can be used reliably in many different settings.

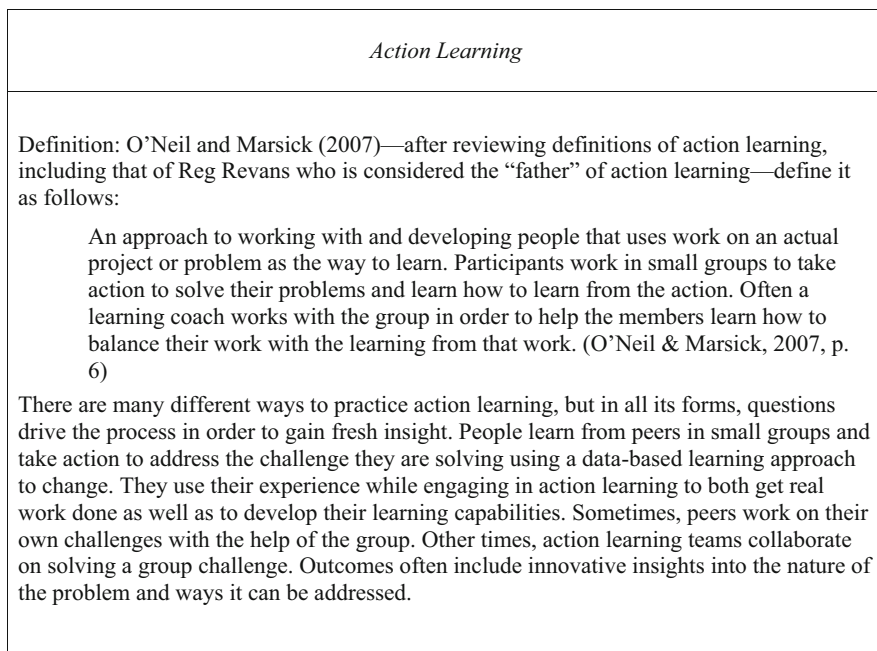
Organizations could benefit by using a standard diagnostic survey tool that we have available to assess their system learning and performance, and underlying

system dynamics. Customizing the survey has many benefits. Nonetheless, a standard diagnostic version of our survey will provide a profile of strengths and weaknesses that serves as a good diagnostic starting point, as well as pointing to key barriers to address and supports to leverage in order to improve learning and performance

The standard diagnostic survey tool can be tailored, if desired, by first conducting a small number of interviews or focus groups with key stakeholders. Interpreting results will help the organization understand how to address challenges or undertake change—whether in one unit or function, across the organization, or between organizations that need to collaborate.

Combining analysis with other strategic learning interventions can further deepen insights into system dynamics. For example, analysis of system dynamics might be accompanied by work on strategic challenges in Action Learning teams. For more information about Action Learning, see Fig. 10.3, as well as O’Neil and Marsick (2007). Organizations can thus develop their future talent while also tackling business goals for which solutions are not yet clear and may be hard to imagine. High potential leaders can learn to think more complexly about the enterprise as a whole.

Other ways that this format could be used might include a community of practice within a large global organization or even across organizations. Members of the community can interview one another about interventions and jointly analyze what they have learned.



**Fig. 10.3** Action learning definition and characteristics

## 10.5 Embarking on a Learning Approach to Change

Adopting and using our model will support a learning approach to change—which we contrasted to a planned change approach at the end of Chap. 2 after introducing our model and instruments. Our learning approach to change emphasizes experimentation to help organizations try out innovative ways of working and organizing themselves while minimizing risk by collecting and using data that allow for continuous course correction toward desired goals.

There are no “best practices.” There are good practices, supported by best processes, but they cannot be simply replicated. The logic underlying effective practices must be understood and implemented in new settings.

In our work with organizations, we have learned that there is no one right way—that can be “cut and paste” and used as is without modification—in other organizations because the underlying dynamics are different. What works in one setting might not work that way in another organization. The intervention selected might be the right thing to do, but other things might need to be done first, or in addition. It might need to be rolled out or scaled up differently than in the originating organization, or it might be more effective to try something else instead. It is also possible that the intervention is not being carried out in the prescribed manner to get desired outcomes.

A good example of a practice—that when sometimes adopted as a “best practice did not produce desired results of the kind obtained in its original setting—is the After Action Review (AAR). AARs were developed by the U.S. Army to ensure that fighting units could get the best information about what worked or did not in battle in order to save lives and defeat the enemy. AARs start with gathering key stakeholders, no matter their level in the hierarchy, and use data gathered during the initiative to establish “ground truth” rather than relying on faulty, and sometimes self-serving, memory of what happened. AARs begin by inquiring into what was expected to happen (goals) and then examine what actually happened using gathered data. The greatest effort, and time allotment, is spent in discussing what went well or not and why that happened. This analysis, which often needs facilitation, must be done without finger-pointing and blaming. It leads to the ability to identify what can be improved and how. Lipshitz et al. (2007) describe ways that the Israeli defense forces have built the AAR format into post-flight reviews that build continuous learning for individual pilots as well as teams and squadrons.

Darling et al. (2005) note that AARs quickly became a popular business tool, having been adopted, for example, at Colgate-Palmolive, DTE Energy, and Harley-Davidson. They also describe the difficulty that companies have in carrying out AARs rigorously: “It is simply too easy for companies to turn the process into a pro forma wrap-up. All too often, scrapped projects, poor investments, and failed safety measures end up repeating themselves.” These authors—who have successfully helped many companies adapt the AAR in business settings—learned through interviews at a dozen organizations that failures often occur because of three common misperceptions about the AAR: “that it is a meeting, that it is a report,

or that it is a postmortem.” They conclude that AARs are treated as a “noun” whereas they should be considered a “verb . . . a living, pervasive process that explicitly connects past experience with future action” as it is in the U.S. Army or the Israeli defense forces.

Throughout this book, we have made and illustrated several key points:

- Learning is an enabling strategic resource for organizations seeking innovation and competitive performance—yet, focusing efforts solely on learning and capability development is not enough to reach an organization’s strategic goals
- The key to results in today’s complex, dynamic, global environment is diagnosing and managing system dynamics
- These system dynamics are both transformational—enduring patterns of organizational behavior—and transactional—day-to-day interactions and behaviors that are unlikely to persist unless deeper changes are made in an organization’s mission and vision, strategy, and culture
- Leaders need to manage dynamics at both levels—often starting with transformational dynamics to orient direction and send explicit and implicit messages about mission, vision and strategy—and then using transactional dynamics to change day-to-day thinking, behavior, and practices that make transformational dynamics more effective in reaching goals
- There is no one best or right way to manage system dynamics—but leaders and managers can look at underlying system dynamics to make choices about actions to take and pathways to follow that are suited to their context and setting
- Interim learning and performance outcomes—including external and internal alignment, commitment, innovation, knowledge creation and expertise sharing, group and organizational learning—are good predictors of goal achievement
- These interim learning and performance outcomes can be measured, monitored, and used to adjust actions taken when adopting a learning approach to change

As we conclude this book, we would thus like to reinforce that there is no one right way to start, but effective diagnosis of the situation provides a competitive advantage. Learning alone is not enough to drive innovation and sustain performance. Changes in the organization are also needed to leverage system dynamics. Data help leaders start where they can get leverage that leads to improved learning and performance. When combined with effective management of the right system dynamics, leaders and stakeholders can make changes in alignment (internal and external), commitment, innovation, as well as knowledge creation and expertise sharing that have desired effects. Success builds on success, as long as it is tempered with further data gathering used to make decisions and experiment with new practices that move the organization toward its strategic goals.

## References

- Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (2002). *The boundaryless organization: Breaking the chains of organizational structure, revised and updated*. San Francisco: Jossey-Bass.
- Darling, M., Parry, C., & Moore, J. (2005, July-August). Learning in the thick of it. *Harvard Business Review*, [www.hbr.org/2005/07/learning-in-the-thick-of-it](http://www.hbr.org/2005/07/learning-in-the-thick-of-it)
- Dixon, N. M., Allen, N., Burgess, T., Kilner, P., & Schweitzer, S. (2005). *Unleashing the power of the Army profession*. WestPoint, NY: US Army: The Center for the Advancement of Leader Development and Organizational Learning.
- Gephart, M. A. (1995). The road to high performance. *Training and Development*, 49(6), 29–38.
- Gephart, M. A. (1997). *Building effective organizations*. Paper commissioned by the Aspen Institute Roundtable on Comprehensive Community Initiatives.
- Gephart, M. A., Marsick, V. J., & Shiotani, A. K. (2010). *Institutionalizing a performance-based learning perspective*. Research report prepared for Booz Allen Hamilton. J.M. Huber Institute for Learning in Organizations, Columbia University, Teachers College.
- Himmelman, A. T. (1997). *Devolution as an experiment in citizen governance: Multi-organization partnerships and democratic revolutions*. Working paper for the fourth annual conference on multi-organizational partnerships and cooperative strategy. Oxford University.
- Lipshitz, R., Friedman, V. J., & Popper, M. (2007). *Demystifying organizational learning*. Thousand Oaks, CA: Sage Publications.
- O'Neil, J., & Marsick, V. J. (2007). *Understanding action learning*. New York: AMACOM.