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Cases on Learning Design and Human Performance Technology

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EBSCO Publishing : eBook Collection
(EBSCOhost) - printed on 2/9/2023 12:45 AM via
AN: 2216961 ; Stefaniak, Jill E., Information
Science Reference (Publisher), IGI Global ;
Cases on Learning Design and Human Performance
Technology 
Account: ns335141

Cases on Learning Design and Human Performance Technology

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A volume in the Advances in
Human Resources Management
and Organizational Development
(AHRMOD) Book Series



Published in the United States of America by
IGI Global
Business Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

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Library of Congress Cataloging-in-Publication Data

Names: Stefaniak, Jill E., 1984- editor. | Information Science Reference (Publisher) | IGI Global.

Title: Cases on learning design and human performance technology / Jill Stefaniak, editor.

Description: Hershey, Pennsylvania : Business Science Reference (an imprint of IGI Global), 2019. | Summary: "This book examines relevant cases that demonstrate how principles of learning design and human performance technology have been employed within organizations. It also addresses business problems, quality improvement initiatives, and business opportunities"-- Provided by publisher.

Identifiers: LCCN 2019015793 | ISBN 9781799800545 (hardcover) | ISBN 9781799800552 (paperback) | ISBN 9781799800569 (ebook)

Subjects: LCSH: Performance technology. | Organizational effectiveness. | Management.

Classification: LCC HF5549.5.P37 C38 2019 | DDC 658.3/124--dc23

LC record available at <https://lccn.loc.gov/2019015793>

This book is published in the IGI Global book series Advances in Human Resources Management and Organizational Development (AHRMOD) (ISSN: 2327-3372; eISSN: 2327-3380)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material.

The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.



Advances in Human Resources Management and Organizational Development (AHRMOD) Book Series

ISSN:2327-3372
EISSN:2327-3380

Editor-in-Chief: Patricia Ordóñez de Pablos, Universidad de Oviedo, Spain

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Table of Contents

Preface	xvii
----------------------	------

Chapter 1

Performance Mapping and Gap Analysis: A Sustainable Evidence-Based Process for Driving Real Results	1
<i>Bonnie Beresford, Bonnie Beresford & Associates, LLC, USA</i>	
<i>Milica Vincent, Volkswagen Group of America, USA</i>	

Chapter 2

Building Performance Systems That Last.....	25
<i>Joe Monaco, Monaco Group, Inc., USA</i>	
<i>Edward W. Schneider, Peacham Pedagogics, USA</i>	

Chapter 3

The HPT Model Applied to a University Technology and Learning Center's Resource Allocation.....	42
<i>Sreeja Sreenivasan Mattookkaran, University of North Carolina at Charlotte, USA</i>	
<i>Terri Mestre, University of North Carolina at Charlotte, USA</i>	
<i>Barbara Shortt, University of North Carolina at Charlotte, USA</i>	
<i>Florence Martin, University of North Carolina at Charlotte, USA</i>	

Chapter 4

The Balancing Act: Interpersonal Aspects of Instructional Designers as Change Agents in Higher Education.....	58
<i>Justin A. Sentz, Shippensburg University, USA</i>	

Chapter 5

Journey to Project Management Program Design: Certification, Alignment,
and Quality in Higher Education80

Nancy Crain Burns, Crain Burns Associates LLC, USA

Gabriela Ziegler, Davenport University, USA

Chapter 6

Improving Performance, Self-Efficacy, and Motivation: Structured Online
Training and Authentic Learning109

Victoria Lynn Lowell, Purdue University, USA

George Orren Hanshaw, Azusa Pacific University, USA

Chapter 7

Training as the Beginning of a Deeper Conversation: Challenging How It Is
Offered and What It Includes125

Jesse Strycker, Ohio University, USA

Chapter 8

Insider Effects: Empathy in Needs Assessment Practice142

Kim Pinckney-Lewis, Old Dominion University, USA

John Baaki, Old Dominion University, USA

Chapter 9

Sales Improvement Initiative Reveals Need for Performance Improvement
Interventions163

Padmakshi Parkhe O'Neil, Pennsylvania State University, USA

Chapter 10

A Decade's Worth: A Construction Firm's Journey From Recovery to
Growth179

Ria Roy, Independent Researcher, Canada

Chapter 11

Improving Classroom Management and Teacher Retention: A Needs
Assessment.....201

Jill Stefaniak, University of Georgia, USA

Jilian L. Reynolds, Old Dominion University, USA

Tian Luo, Old Dominion University, USA

Chapter 12	
Using Training to Address Excessive Turnover in a Fast Food Organization.....	227
<i>Jill Karen Jinks, University of Georgia, USA</i>	
<i>Karen E. Watkins, University of Georgia, USA</i>	
Chapter 13	
Capitalizing on Franchisee Know-How: A Restaurant Chain Engages in Benchmarking	248
<i>Denise M. Cumberland, University of Louisville, USA</i>	
<i>Kathleen E. Gosser, University of Louisville, USA</i>	
Chapter 14	
Leading Edge Training for Leading Edges: Experiential Learning to Improve Human Performance and Product Quality	270
<i>George O. Hanshaw, Purdue University, USA</i>	
<i>Victoria Lynn Lowell, Purdue University, USA</i>	
Chapter 15	
Creating Unlimited Business Opportunities for an Insurance Sales Force Through Design Thinking.....	287
<i>Inno Man, COXO Community, Hong Kong</i>	
<i>David Chung, InnoEdge Consulting, Hong Kong</i>	
Chapter 16	
“But I Know How to Google”: Motivating Volunteers in an Information Literacy Module.....	305
<i>Kirsten Hostetler, Old Dominion University, USA</i>	
<i>Kim Pinckney-Lewis, Old Dominion University, USA</i>	
Compilation of References	334
About the Contributors	351
Index	358

Detailed Table of Contents

Preface..... xvii

Chapter 1

Performance Mapping and Gap Analysis: A Sustainable Evidence-Based Process for Driving Real Results 1

Bonnie Beresford, Bonnie Beresford & Associates, LLC, USA
Milica Vincent, Volkswagen Group of America, USA

When the learning and development manager of a financial services firm wanted to improve organizational performance, she stated, “I want to understand what the best performers do, and make the rest more like the best.” By studying high-performing salespeople, the organization discovered behaviors and practices that such performers did that made them more successful than their colleagues. Using a structured performance mapping process, the team documented the unconscious competence of in-role experts. A gap analysis of all performers objectively identified, quantified, and prioritized curriculum and performance support needs. This case study follows the journey of an organization that adopted this evidence-based process and now executes the gap analysis every third year to ensure continued relevance amid organizational and industry changes. The approach has yielded a highly regarded curriculum, the elimination of development costs for unneeded courseware, a reduction in training time, and changes in hiring profiles.

Chapter 2

Building Performance Systems That Last.....25

Joe Monaco, Monaco Group, Inc., USA
Edward W. Schneider, Peacham Pedagogics, USA

LIFTOR is a human performance system that promotes the safe and efficient operation of industrial forklift trucks. The original installation occurred in 1985. In the ensuing 30 years, it was installed at 16 sites. In spite of meeting its design goals, not all of these installations have survived, but because the same problem existed,

and the same system was used to solve it, we can attribute the failures to differences between the sites. Some sites were closed for reasons unrelated to LIFTOR. Others failed because of systemic conflicts, but most of them failed after specific events occurred, such as new managers, new budgeting or contracting policies, or loss of support from corporate headquarters. Most of them could have been prevented by relying less on a corporate champion, and more on good cost-effectiveness reporting, coupled with more systematic training and involvement of front-line managers.

Chapter 3

The HPT Model Applied to a University Technology and Learning Center’s Resource Allocation.....42
Sreeja Sreenivasan Mattookkaran, University of North Carolina at Charlotte, USA
Terri Mestre, University of North Carolina at Charlotte, USA
Barbara Shortt, University of North Carolina at Charlotte, USA
Florence Martin, University of North Carolina at Charlotte, USA

The International Society for Performance Improvement (ISPI) Human Performance Technology model was used as a guideline for this case study and applied to assess and evaluate the resource allocation at the Technology and Learning Center (TLC). This model has proven to be a useful guideline as a process to be followed during the project. A team of instructional systems technology graduate students served in a consulting role on this project to help the TLC allocate resources and redesign processes on how support tickets were handled. The project team conducted performance analysis through extensive stakeholder interviews and extant data review to perform organizational, environmental, gap and cause analysis. Through these analyses, performance issues were isolated, the causes behind them were identified and concluded with the recommendation of interventions to the client.

Chapter 4

The Balancing Act: Interpersonal Aspects of Instructional Designers as Change Agents in Higher Education.....58
Justin A. Sentz, Shippensburg University, USA

Upon hearing a multitude of complaints from faculty members about the required training module prior to teaching online courses at Great Plains University for the first time, the instructional designers at GPU’s North Central Campus decided to work with a faculty fellow to create a local version of the training. Before discussing specific modifications to the training module, the group delved into the interpersonal aspects of the relationship between instructional designers and faculty members in higher education. They suspected that these relationship dynamics had something to do with the shortcomings of the existing training module, and they wanted to

ensure that they addressed them in the new version of the training. The result was a set of recommendations sent to the Provost at NCC that aligned the modifications to the training intervention to the performance problems in the institution, while simultaneously accounting for the interpersonal aspects identified in their discussions.

Chapter 5

Journey to Project Management Program Design: Certification, Alignment,
and Quality in Higher Education80

Nancy Crain Burns, Crain Burns Associates LLC, USA

Gabriela Ziegler, Davenport University, USA

Approaching a project can be considered a journey of discovery. Each person involved has a different background and comes to the table with a diverse perspective. The authors use the analogy of a journey throughout the context of the case study. Providing quality education for university students often includes a journey toward the best approach. This journey entails outlining the appropriate curriculum, finding the appropriate content, establishing dynamic learning objectives and aligning the course with student needs and learning styles. After these criteria are met, the university seeks and selects the most qualified faculty members to teach the course(s). When specialized credentialing requirements are involved, the University must take further steps to ensure that each course meets the standards of the certifying body. The context of this journey and enhancement of Davenport University's Global Project Management Program will include three parts. Part I will review recognition that course updates were necessary to meet changes in the latest revision of the Project Management Body of Knowledge (PMBOK® Guide 6th ED, 2017). The university faculty, staff and a consultant with project management credentials developed a consistent process for making updates and ensuring that changes were made to meet requirements. Throughout the consulting phase, principles of Human Performance Improvement/Technology were followed to develop this process. Part II will exhibit a case study that illustrates successful student certification pursuit after completing the capstone course in the program. Part III will review future opportunities for application of performance improvement principles to other projects.

Chapter 6

Improving Performance, Self-Efficacy, and Motivation: Structured Online
Training and Authentic Learning 109

Victoria Lynn Lowell, Purdue University, USA

George Orren Hanshaw, Azusa Pacific University, USA

Suzy Whitman, an experienced instructional designer and program manager, was hired to coordinate a new online graduate program at a large university. It was Suzy's responsibility to identify and implement solutions to the rapidly growing program's

needs. Identifying problems, evaluating the need, thinking through a modification and implementation process, and considering the potential impact of change, are all important steps. In this case study, Suzy needed to identify the problems, determine a solution, and then implement that solution. After speaking with her new supervisor, Suzy determined additional instructors needed to be hired to meet the growing program's needs. Although Suzy did briefly analyze the situation and provide a potential solution, the solution Suzy implemented needed further development to ensure it was implemented in an effective manner.

Chapter 7

Training as the Beginning of a Deeper Conversation: Challenging How It Is Offered and What It Includes 125
Jesse Strycker, Ohio University, USA

A substantial renovation to a historic college and building resulted in a state-of-the-art building, full of new technologies and possibilities for new kinds of technology-enhanced teaching. Technology malfunctions slowed adoption and exploration of these possibilities, but limited communication and training accompanied by institutionally-mandated scheduling system stagnated adoption and innovation further. This case explores these issues and how an unconventional training series has started a deeper conversation about these issues and promoted more pedagogical experimentation.

Chapter 8

Insider Effects: Empathy in Needs Assessment Practice 142
Kim Pinckney-Lewis, Old Dominion University, USA
John Baaki, Old Dominion University, USA

Needs assessment generally refers to the identification of some need or problem to be addressed. The authors aim to demonstrate how empathy, when shaped by authentic affinity or involvement with an organization, can serve the needs assessment experience in a positive way. As part of the chapter, the authors describe their approach and highlight pertinent findings from the needs assessment, which focused on proactive opportunities to enhance outcomes in parent efficacy. The authors also detail accounts of participant experiences within the process, including their interactions with the practitioner and overall experience. Finally, the authors share practitioner reflections on the overall process.

Chapter 9

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions	163
<i>Padmakshi Parkhe O'Neil, Pennsylvania State University, USA</i>	

This chapter posits the use of Thomas Gilbert's Behavior Engineering Model to improve human performance in the workplace. The author suggests that it is critical to apply a holistic approach when approaching any human performance improvement initiatives. Sales within an organization is a human performance issue and recurring sales performance problems should be addressed by delving to the root of the human performance issues at hand. It is critical to consider not just the repertoire of human behavior, but also examine the supporting environment, to ensure it provides the necessary impetus to improving performance.

Chapter 10

A Decade's Worth: A Construction Firm's Journey From Recovery to Growth	179
<i>Ria Roy, Independent Researcher, Canada</i>	

After witnessing a year-on-year growth of 50% since its inception in 1993, Ziggurat Developers was well on its way to being the next niche, technically sophisticated, and edgy construction company in Mumbai, India. This case takes a deep dive into how winning a prestigious construction contract in the country led to Ziggurat's loss of revenue, cash flow deficits, year-on-year losses, high financing costs, loss of banking, idling of resources, loss of credibility, and high employee turnover rate. Instead of these significant contracts providing a strong foothold in the construction industry, it destroyed Ziggurat and the recovery took a decade. Performance improvement is often the study of how to improve performance when discrepancies are confined to a silo or a subset of functions within an organization. But how do you get back to exemplary performance when you are boxed in and there is no way out?

Chapter 11

Improving Classroom Management and Teacher Retention: A Needs Assessment.....	201
<i>Jill Stefaniak, University of Georgia, USA</i>	
<i>Jilian L. Reynolds, Old Dominion University, USA</i>	
<i>Tian Luo, Old Dominion University, USA</i>	

This case explores how a needs assessment was conducted at a middle school experiencing high rates of teacher turnover. Pamela Frost, an experienced instructional designer, was assigned to assess the situation and identify opportunities

to improve professional development opportunities for the teachers. As a part of a needs assessment, Pamela gathered data to address needs pertaining to classroom management challenges, teacher attrition rates, and establishing relations with the local community. This case explores how Pamela gathered data and triangulated her findings to determine what interventions were needed.

Chapter 12

Using Training to Address Excessive Turnover in a Fast Food

Organization.....227

Jill Karen Jinks, University of Georgia, USA

Karen E. Watkins, University of Georgia, USA

The purpose of this case is to present a story about an effort to address a threatening business problem for a company in an industry that relies on low-wage, minimally-skilled employees. The industry is characterized by high turnover that makes training efforts difficult. The designers and developers had to be flexible, creative and innovative in creating their project plan and instructional intervention. The dynamics of the organization were fluid. The team had to consider these dynamics in selecting their approach. They had to be comfortable with using approximations and assumptions in developing the inputs for their design and development decisions. Ambiguity and uncertainty were constants for the team members.

Chapter 13

Capitalizing on Franchisee Know-How: A Restaurant Chain Engages in

Benchmarking248

Denise M. Cumberland, University of Louisville, USA

Kathleen E. Gosser, University of Louisville, USA

While the current labor market is a dream for aspiring future employees, the low unemployment rate and the pervasive availability of hourly jobs makes it much more difficult in the quick service restaurant industry for employers. Hiring and retaining a solid team is a common concern across the industry; often it is easier to hire than to retain. Entry level employees are easily persuaded to work for a competitor for very little added pay. This current phenomena requires organizations to find differentiating tactics to retain their workforce. This case study explores a franchise restaurant chain in their quest to become an Employer of Choice in this very competitive industry. Franchise consultants were hired to explore best practices. The authors detail how a benchmarking tool was used to secure the information as well as the outcomes of the study. Specific actions are cited that can improve the retention of hourly employees in the quick service restaurant industry.

Chapter 14

Leading Edge Training for Leading Edges: Experiential Learning to Improve Human Performance and Product Quality270

George O. Hanshaw, Purdue University, USA

Victoria Lynn Lowell, Purdue University, USA

Ruben, the learning and development manager for Aerosector, was tasked to help the composite manufacturing team increase their production rate and lower the defect rate for the manufacturing of composite leading edge parts for a newly designed aircraft. Initially, it took approximately 28 days to build one of the parts, and the defect rate for the parts was over 30 percent. Ruben put together a cross-functional team to devise a solution that would decrease the production rate of the parts to 15 days or less and reduce the defect rate to less than 0.5 percent for non-repairable defects and less than 2 percent for repairable defects. After performing a gap analysis, the team came up with the solution to build a training class utilizing experiential learning to quickly increase performance in the shop and meet the build requirements.

Chapter 15

Creating Unlimited Business Opportunities for an Insurance Sales Force Through Design Thinking.....287

Inno Man, COXO Community, Hong Kong

David Chung, InnoEdge Consulting, Hong Kong

New insurance agents approach their pool of close friends and family members because these people have a high level of trust in them and therefore their rate of closing should be higher. As the size of their client pools is a critical survival factor and trust cannot be built rapidly, one major reason that agents quit their jobs is that they deplete their pools. For resolving that industrial deadlock, the company developed a social sales model through design thinking to help insurance agents build trust among their prospective customers. After implementing a pilot project in Hong Kong in 2018, the agents enhanced their abilities of social influencing, lead generation, and deal closing. Following the successful pilot project, the company continues to transform its business and leverage its social sales advantage in Asia.

Chapter 16

“But I Know How to Google”: Motivating Volunteers in an Information Literacy Module.....305

Kirsten Hostetler, Old Dominion University, USA

Kim Pinckney-Lewis, Old Dominion University, USA

An up-front analysis is crucial to ensuring a need is learning-related and the resulting intervention actually meets that need for learners. The current case study explores how two instructional designers adopted a systems approach for their performance analysis, with a major focus on learner analysis as a means to understand the underpinnings of the social system within the client organization, which more clearly revealed potential motivations of the learners. As a result, the two designers delivered an eLearning module that 1) combats an actual gap in knowledge and skill, 2) is relevant to the intended audience, and 3) is compatible with the organizational culture and infrastructure.

Compilation of References 334

About the Contributors 351

Index..... 358

Preface

Human performance technology (HPT) is a systematic approach for improving performance that takes into account organizational, environmental, and causal analyses in order to make data-driven decisions regarding intervention design, implementation, and evaluation (International Society for Performance Improvement, 2013). Principles of HPT are used in a variety of different industries to solve problems, assist with qualitative improvement initiatives, and identify future business opportunities. Performance improvement technologists take the entire organizational environment into account when developing strategies and interventions to address an organizational need.

This casebook is a collection of 16 teaching case studies that are intended to provide educators, students, and practitioners with an opportunity to see how principles of learning design of human performance technology have been implemented in various contexts and industries. Like most fields, students are taught best practices but are not always privy to understanding the challenges that can occur when attempting to implement these best practices in the real world. Lack of resources, organizational buy-in and timing can all hinder performance, requiring practitioners to work creatively to implement solutions within a limited timeframe. Often times, performance improvement technologists are tasked with implementing multiple interventions (instructional and non-instructional) at the same time. The success of any intervention is dependent on whether or not it meets the needs identified during the initial assessment of the perceived performance problem.

It is in the intent of this casebook to provide those with an interest in learning design and human performance technology a repertoire of cases where human performance improvement initiatives were employed. Each case provides insight as to how analyses were carried out, the design of interventions, and how organizational culture contributed to the performance problem being addressed. The goal of this case book is to provide educators, students, and practitioners with in-depth case studies, showcasing real-life applications of HPT in a variety of different industries

and contexts, that can be used for instructional purposes in human performance technology and performance improvement courses. The cases featured in this book address how projects were implemented within the following industries: higher education, manufacturing, government, healthcare, and non-profit sectors.

Topics addressed within the case studies include the following:

- Conducting performance analyses
- Solving business problems
- Identifying and selecting performance improvement interventions
- Implementing instructional and/or noninstructional interventions
- Implementing change management strategies within organizations
- Employee development
- Instructional design
- Changes in workflow procedures
- Performance support systems

BOOK OBJECTIVE

The overall mission of this book is to provide educators in the field of human performance technology, organizational development, educational technology, and business management with a compilation of case studies based on real-life experiences that can be integrated within their classes utilizing a problem-based instructional technique. The goals for this case book are to 1) provide relevant cases that demonstrate how principles of learning design and HPT have been employed within organizations, 2) provide examples of how learning design and HPT has been utilized in a variety of different industries, and provide a combination of examples that address business problems, quality improvement initiatives, and business opportunities.

This case book includes 16 cases from educators and professionals in the performance improvement field who have applied human performance technology standards and principles in a variety of different contexts to solve performance problems. Each case highlights the challenges encountered in conducting analyses, designing interventions, and identifying strategies to implement performance improvement plans.

AUDIENCE

The target audience for this book consists primarily of educators and students in the field of human performance technology. The cases included in this book could be of benefit to courses within business management, performance improvement, organizational development, and instructional design and technology programs. Each case consists of a real-life unique problem or opportunity that was addressed, as well as a detailed account of the steps taken to arrive at a solution. It is the intent of this casebook that educators will be able to utilize this book as a supplemental text to build upon the theoretical textbooks addressing the topics of HPT and provide students with examples of how principles of HPT have been applied to solve real problems in a variety of different organizations and contexts. The cases included in this book can be used as both individual and group assignments in face-to-face and distance learning environments.

ORGANIZATION

This book contains 16 cases that span across a wide variety of contexts, including higher education, manufacturing, government, hospitality, and non-profit sectors. Topics range from strategies employed during performance analyses, instructional and noninstructional solutions, and performance support systems. Each case presents a unique performance problem along with a detailed account of the steps taken to arrive at a solution.

Chapter 1 guides us through process consultants used to conduct a gap analysis in the automotive industry. Using a structured performance mapping process, the team documented the unconscious competence of in-role experts. A gap analysis of all performers objectively identified, quantified, and prioritized curriculum and performance support needs. This case study follows the journey of an organization that adopted this evidence-based process and now executes the gap analysis every third year to ensure continued relevance amid organizational and industry changes.

Chapter 2 builds upon a case presented in the first edition of this book addressing performance gaps in a manufacturing company. In a previous chapter (Monaco & Schneider, 2015) the authors described the many installations of LIFTOR, our performance system to promote the safe and efficient operation of industrial forklift trucks. The original installation occurred in 1985, followed by installations at fifteen other sites. Not all of these installations have survived, but because the same problem existed and the same system was used to solve it, we can attribute the failures to

differences between the sites. Some sites failed because of systemic conflicts, but most of them failed after specific events occurred, such as new managers, new budgeting or contracting policies, or loss of support from corporate headquarters. In the current case, the authors describe how these failures came about, and how the more successful implementations surmounted them.

Chapter 3 explores demonstrates how the Human Performance Technology model was used to facilitate performance challenges in a higher education teaching and learning center. A team of instructional systems technology graduate students served in a consulting role on this project to help the TLC allocate resources and redesign processes on how support tickets were handled. The project team conducted performance analysis through extensive stakeholder interviews and extant data review to perform organizational, environmental, gap and cause analysis. Through these analyses, performance issues were isolated, the causes behind them were identified and concluded with the recommendation of interventions to the client.

Chapter 4 guides us through how a performance improvement specialist worked with a faculty fellow to improve training for faculty developing online courses at a higher education institution. Before discussing specific modifications to the training module, the group delved into the interpersonal aspects of the relationship between instructional designers and faculty members in higher education. They suspected that these relationship dynamics had something to do with the shortcomings of the existing training module, and they wanted to ensure that they addressed them in the new version of the training. The result was a set of recommendations sent to the Provost at NCC that aligned the modifications to the training intervention to the performance problems in the institution, while simultaneously accounting for the interpersonal aspects identified in their discussions.

Chapter 5 use the analogy of a journey throughout the context of a performance improvement scenario in higher education. Providing quality education for university students often includes a journey toward the best approach. This journey entails outlining the appropriate curriculum, finding the appropriate content, establishing dynamic learning objectives and aligning the course with student needs and learning styles. After these criteria are met, the university seeks and selects the most qualified faculty members to teach the course(s). When specialized credentialing requirements are involved, the University must take further steps to ensure that each course meets the standards of the certifying body. The context of this journey and enhancement of Davenport University's Global Project Management Program will include three parts: Course updates for certification; student pursuit of certification and future application of performance improvement principles.

Preface

Chapter 6 describes how an experienced instructional designer and program manager, was hired to coordinate a new online graduate program at a large university. It was her responsibility to identify and implement solutions to the rapidly growing program's needs. Identifying problems, evaluating the need, thinking through a modification and implementation process, and considering the potential impact of change, are all important steps. In this case study, the instructional designer needed to identify the problems, determine a solution, and then implement that solution. After speaking with her new supervisor, she determined additional instructors needed to be hired to meet the growing program's needs. Although she did briefly analyze the situation and provide a potential solution, the solution she implemented needed further development to ensure it was implemented in an effective manner.

Chapter 7 demonstrates how lack of communication can have a significant impact on performance in a higher education institution. A substantial renovation to a historic college and building resulted in a state-of-the-art building, full of new technologies and possibilities for new kinds of technology-enhanced teaching. Technology malfunctions slowed adoption and exploration of these possibilities, but limited communication and training accompanied by institutionally-mandated scheduling system stagnated adoption and innovation further. This case explores these issues and how an unconventional training series has started a deeper conversation about these issues and promoted more pedagogical experimentation.

Chapter 8 provides an overview of how empathy, when shaped by authentic affinity or involvement with an organization can serve the needs assessment experience in a positive way. As part of the chapter, the authors describe their approach and highlight pertinent findings from the needs assessment, which focused on proactive opportunities to enhance outcomes in parent efficacy. The authors also detail accounts of participant experiences within the process, including their interactions with the practitioner and overall experience. Finally, the authors share practitioner reflections on the overall process.

Chapter 9 describes how Thomas Gilbert's Behavior Engineering Model was used to identify performance interventions for a sales initiative in an organization. The author suggests that it is critical to apply a holistic approach when approaching any human performance improvement initiatives. Sales within an organization is a human performance issue and recurring sales performance problems should be addressed by delving to the root of the human performance issues at hand. It is critical to consider not just the repertoire of human behavior, but also examine the supporting environment, to ensure it provides the necessary impetus to improving performance.

Chapter 10 takes a deep dive into how winning a prestigious construction contract in the country led to Ziggurat's loss of revenue, cash flow deficits, year-on-year losses, high financing costs, loss of banking, idling of resources, loss of credibility, and high employee turnover rate. Instead of these significant contracts providing a strong foothold in the construction industry, it destroyed Ziggurat and the recovery took a decade. Performance improvement is often the study of how to improve performance when discrepancies are confined to a silo or a subset of functions within an organization. But how do you get back to exemplary performance when you are boxed in and there is no way out?

Chapter 11 explores how a needs assessment was conducted at a middle school experiencing high rates of teacher turnover. Pamela Frost, an experienced instructional designer, was assigned to assess the situation and identify opportunities to improve professional development opportunities for the teachers. As a part of a needs assessment, Pamela gathered data to address needs pertaining to classroom management challenges, teacher attrition rates, and establishing relations with the local community. This case explores how Pamela gathered data and triangulated her findings to determine what interventions were needed.

Chapter 12 presents a story about an effort to address a threatening business problem for a company in an industry that relies on low-wage, minimally skilled employees. The industry is characterized by high-turnover that makes training efforts difficult. The designers and developers had to be flexible, creative and innovative in creating their project plan and instructional intervention. The dynamics of the organization were fluid. The team had to consider these dynamics in selecting their approach. They had to be comfortable with using approximations and assumptions in developing the inputs for their design and development decisions. Ambiguity and uncertain were constants for the team members.

Chapter 13 guides us through the challenges that many franchise restaurants experience addressing their workforce. While the current labor market is a dream for aspiring future employees, the low unemployment rate and the pervasive availability of hourly jobs makes it much more difficult in the quick service restaurant industry for employers. Hiring and retaining a solid team is a common concern across the industry; often it is easier to hire than to retain. Entry level employees are easily persuaded to work for a competitor for very little added pay. This current phenomenon requires organizations to find differentiating tactics to retain their workforce. This case study explores a franchise restaurant chain in its quest to become an Employer of Choice in this very competitive industry. Franchise consultants were hired to explore best practices. The authors detail how a benchmarking tool was used to secure the

Preface

information as well as the outcomes of the study. Specific actions are cited that can improve the retention of hourly employees in the quick service restaurant industry.

Chapter 14 explores how an advanced aircraft company used performance improvement strategies to address quality and safety issues. Aerosector was tasked to build the composite leading edge portions of the wings. The leading edges initially took approximately 28 days to build, which was too long based on client needs. The parts were not meeting quality specifications. The defect rate of completed parts was over 30% when combining the repairable and non-repairable defects. In order for the shop to meet the needs of their client, Star Systems, they had to reduce the manufacturing time to less than 15 days and the defect rates to less than 0.5% for non-repairable defects and less than 2% for repairable defects. The Learning and Development team at Aerosector was engaged by the manufacturing team to provide a gap analysis and assist the manufacturing department.

Chapter 15 demonstrates alignment between human performance technology strategies and design thinking. The case provides a description of an insurance company in Hong Kong utilized principles of design thinking to develop customer interventions that were grounded in empathy and customer service. After implementing a pilot project in Hong Kong in 2018, the agents enhanced their abilities of social influencing, lead generation, and deal closing. Following the successful pilot project, the company continues to transform its business and leverage its social sales advantage in Asia.

Chapter 16 explores how two instructional designers adopted a systems approach for their performance analysis, with a major focus on learner analysis as a means to understand the underpinnings of the social system within the client organization, which more clearly revealed potential motivations of the learners. As a result, the two designers delivered an eLearning module that 1) combats an actual gap in knowledge and skill, 2) is relevant to the intended audience, and 3) is compatible with the organizational culture and infrastructure.

CLOSING REMARKS

Organizations, regardless of industry, are in a never-ending search to improve performance and identify opportunities to expand their operations. Depending on the industry, project, and organizational constraints, there are many ways instructional designers and performance improvement technologists may approach any given project. This casebook, focusing on human performance technology decisions and learning design strategies, provides students with opportunities to see how principles

of human performance technology are applied in a variety of real situations. The cases featured in this book provide examples of various types of projects that utilized principles of human performance technology and how interventions were implemented in a variety of industries such as higher education, governmental, manufacturing, non-profits, and hospitality.

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Chapter 1

Performance Mapping and Gap Analysis: A Sustainable Evidence-Based Process for Driving Real Results

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EXECUTIVE SUMMARY

When the learning and development manager of a financial services firm wanted to improve organizational performance, she stated, “I want to understand what the best performers do, and make the rest more like the best.” By studying high-performing salespeople, the organization discovered behaviors and practices that such performers did that made them more successful than their colleagues. Using a structured performance mapping process, the team documented the unconscious competence of in-role experts. A gap analysis of all performers objectively identified, quantified, and prioritized curriculum and performance support needs. This case study follows the journey of an organization that adopted this evidence-based process and now executes the gap analysis every third year to ensure continued relevance amid organizational and industry changes. The approach has yielded a highly regarded curriculum, the elimination of development costs for unneeded courseware, a reduction in training time, and changes in hiring profiles.

DOI: 10.4018/978-1-7998-0054-5.ch001

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ORGANIZATION BACKGROUND

When most consumers think of the automobile business, they likely think of manufacturing facilities and dealerships. There is another group of vibrant players in this industry: the financing arms of the automobile manufacturers. By law, “captive” finance companies like Ford Credit, Toyota Financial Services, and VW Credit, Inc. are registered as independent companies, yet they maintain a symbiotic relationship with the manufacturer. The finance companies service the manufacturer’s two important customer bases: the consumers of the manufacturer’s products (buyers and lessees) and its dealerships who sell and service those products.

For dealers, financing plays an important role in providing capital for facility expansion, purchase of vehicles for their lot and equipment for the service department, and funding for consumers. A well-funded dealer is good for the captive as well as for the manufacturer. For consumers, financing enables them to purchase the vehicle of their dreams at a payment they can afford.

Automotive financing is big business. While these captive finance companies may have an edge due to their connection with the manufacturer, they compete every day with banks and other lenders for the lucrative dealer and consumer financing business. The captives strive daily to get a bigger share of each dealer’s financing wallet. A good relationship with a dealer can lead to the dealer sending more new and used consumer contracts to the captive. Thus, the quality of the finance company’s workforce plays an important role in achieving the business goals of both the manufacturer (to profitably sell more vehicles) and the finance company itself (to profitably provide financing to more dealerships and more consumers).

Volkswagen Group (Volkswagen AG), headquartered in Wolfsburg, Germany, and manufacturer of Audi, Bentley, Bugatti, Lamborghini, and Volkswagen among a number of other automotive products, achieved its target to be the largest global automaker in 2017 and 2018. Its “TOGETHER 2025” strategy presents a target of becoming a “world-leading provider of sustainable mobility” while simultaneously being a “role model when it comes to the environment.”

VW Credit, Inc. (VCI), the financing arm of Volkswagen Group of America (VWGoA) headquartered in Herndon, Virginia, plays a key role in supporting this charge. VCI knows that capable and committed employees are crucial to achieving the company’s continued growth and customer satisfaction success.

VCI Academy is the company’s internal training organization, providing learning and professional development to employees across the company, from credit analysts and collection agents to the business development staff that calls on dealerships to gain dealer commitment to make VCI their financier of choice. VCI also provide training to their dealers’ finance and insurance managers, a key role within each

Performance Mapping and Gap Analysis

dealership. The Academy recognizes that time in training is time away from the job. As such, they want to be sure the time invested in training truly helps improve performance.

SETTING THE STAGE

One of VCI's most important job roles is the Business Development Manager (BDM). These individuals are the face of the company to the dealers. BDMs are field salespeople who compete with banks and other financial institutions to earn the dealers' financing business. Each BDM has an assigned geographic territory with an average of 24 dealers per territory. The time BDMs spend with the dealers building relationships and building a business is critical to their success, so time spent in training needs to be fiercely justified as being able to close a known performance gap.

In 2013, VCI Academy had an existing curriculum and certification program in place for BDMs. It was assumed that new courses and new certification requirements would be required every year. Historically, curriculum decisions were made based on opinions and a quick survey of managers, asking them, "What sort of training do your BDMs need?" The new leader of the Academy, Paige Barrie, was not convinced that the training content was addressing the things BDMs really needed. Before embarking on the next year's curriculum plan, she wanted a more objective approach to quantitatively uncover performance gaps and to determine what BDMs really needed to succeed at their jobs.

Barrie knew the Academy needed to do some real investigation into the BDM job and into what high performers were doing that made them so good. This research would require both budgets and pulling BDMs out of the field for interviews. Barrie garnered the support of the Director of Human Resources by explaining how findings could go beyond just improvements to training and how insights into the BDM role could also help HR with recruitment and onboarding.

The Academy selected a needs and gap assessment approach based on a model of performance mapping and gap analysis (Stolovitch & Keeps, 2004), and they brought in human performance improvement consultants to guide the work. The mission was to:

- Identify what behaviors make high performing BDMs so effective
- Identify – and quantify – the skill gaps between high performing BDMs and their colleagues
- Take action to close the gaps

This case study starts by presenting the performance mapping and gap analysis process VCI executed, the results they found and the actions they took. It then revisits VCI three years later to illustrate the sustainability of the map, and the value of re-executing the gap analysis to ensure training remain relevant in a world of constant change, both within the company and across the industry.

CASE DESCRIPTION

VCI Academy wanted to learn from their high performing BDMs. After all, these are the people who are consistently meeting or exceeding their quantifiable business objectives, or key performance indicators (KPIs). As Barrie said, “We want to learn from the best, determine the gaps between the best and the rest, and then bring the rest up to higher levels of performance.”

The first step required the identification of high performers. The BDM job role had six very specific KPIs that served as the foundation for selecting candidates for performance mapping interviews. The KPIs represented various penetration rates of VCI products across the dealers in the BDM’s territory. For example, “New Vehicle Service Contract Penetration” is the percent of new vehicles sold that also includes a VCI service contract. Other KPIs included the percent of dealers using VCI to finance their new and used vehicle inventory, the percent of dealers utilizing VCI’s lease maturity program, and the percentage of new and used vehicles financed through VCI. BDMs were initially ranked on each KPI. These individual rankings were then turned into a composite score, resulting in each BDM being scored as high, medium, or low.

Barrie quickly realized that the numbers didn’t tell the whole story. For VCI, some KPIs were more important than others; hence a weighting scale was applied. Some exceptional BDMs had been transferred to underperforming geographic territories, so their current numbers made them look like under-performers. Looking at historical performance plus engaging regional management in the selection process resolved the problem. Using a combination of past and current KPIs and regional input, Barrie’s team identified 10 high performing BDMs from across the country who consistently ranked among the top 15 performers. The terminology of “high” vs. “top” performers is very intentional. A “top performer” designation would suggest excellence in all regards when in fact most high performers while excelling in many areas, may have room for improvement in others. Further, by the very nature of KPIs, a person could be on top one month and third the next. She is still a high performer.

Performance Mapping and Gap Analysis

Learning what high performers do that makes them so good requires a guided interview process. Simply asking them what they do is usually futile because they are so proficient that their behaviors and actions may be second nature. They may feel they were born knowing and can't imagine that others don't know what they know. Even though they are aware that they perform better, they likely are unable to articulate why. This is called "unconscious competence," the fourth of the four stages of learning, often attributed to psychologist Abraham Maslow and formalized by Noel Burch of Gordon Training International (Adams, 2014). The job of the interviewer then is to tap into the unconscious competence to draw out what these experts do. The task at hand was to codify this high level of competence in the form of a performance map.

The Performance Mapping Methodology

The performance mapping approach engages sets of high performers in an iterative process to build a map of what they do to achieve success. The initial mapping shares similarities with hierarchical task analysis, or job analysis, where tasks are defined, grouped and further supported by subtasks. Importantly, the tasks are the things the high performers actually do – the behaviors that can be learned. The process also uncovers characteristics that are difficult to develop – things that should go into a recruiting and hiring profile. VCI was about to find out that what high performers do may be quite different and more robust than what is in the job description.

The mapping process led performance consultants to four of VCI's regional offices to conduct half-day mapping sessions with two to three BDMs at each location. The first session began with the consultants presenting a "performance statement" – a basic definition of success for a BDM. Participants bantered about the accuracy of the statement, quickly noting the naivety of the corporately generated one. They refined it and crafted a statement of success that they felt defined success as a BDM: "Collaborate with all our business partners to leverage VCI products and services for our mutual success." Once the statement was refined, the consultants then asked the BDMs, "If this is what success looks like, what do you do to achieve it?"

Starting at a high level, participants began identifying what it really takes to get the job done. The map was beginning to take shape, but it was nowhere near complete. High-level tasks came to light, and each was explored for further detail. For example, BDMs identified "Building trust relationships with dealer principals" as critical to success. Interviewers then probed deeper, asking "What do you do to do that?" The BDMs played off each other's contribution, refining, challenging, enhancing, clarifying and synthesizing until they agreed that the map was "right."

They remarked that they were also learning from each other. After half a day of interviewing and mapping, it was time to move on to the next location to let the next group of high performers critique the initial work, and build on it.

To ensure that the map was truly a “performance” map, the consultants pushed participants to express their tasks in action-oriented, observable terms. Bloom’s Taxonomy provides a useful framework for nailing down the verb of what the performer actually *does* in observable, measurable terms (Bloom, 1956; Krathwohl, 2002). This approach pushed the high performing BDMs to really think about what they do and what outcomes they strive for that lead to success. As the map was taking shape, many BDMs remarked that it would be an excellent tool for onboarding new BDMs, simply to show them what the job really entails. They also commented that they would like their bosses to see the map so they would understand everything that good BDMs do every day to consciously (and unconsciously) drive the business.

A validation step followed the building of the map. Two managers of BDMs participated in reviewing the map to provide a management perspective. Their charge was to ensure that VCI’s goals and values were properly represented, to confirm terminology, and to catch any omissions. Their modest changes were largely in making the map politically correct.

The performance map goes beyond the job analysis. During the course of the mapping and through subsequent follow-up clarifying phone calls, the consultants built the “interior” of the map. This additional detail captures information about the conditions needed to perform these activities, the inputs and outputs, and the tools that are needed. It further defines the frequency of each task, how hard it is to learn, how important it is to the job, and the risk of not doing it (Figure 1). Ultimately, the map becomes a roadmap for curriculum design and other performance supports. In fact, because the map uses action-oriented verbs for every task, instructional designers can easily convert performance statements into performance-based learning objectives and the foundation of a course.

The Gap Analysis Methodology

With “ideal performance” documented, VCI’s next step was to understand “current state.” The consultants developed a gap assessment survey using the tasks from the performance map. The same two managers who validated the map also reviewed and validated the survey which would go to all BDMs and their managers. The manager version asked managers to respond with their perceptions of each of their BDMs. The survey asked respondents to rate each task in two ways:

- How important is this to your job? (For managers, “...to the BDM job”)

Performance Mapping and Gap Analysis

Figure 1. Excerpt from final Performance Map

Business Development Manager				
PERFORMANCE	FREQUENCY	LEARN	IMPORTANCE	RISK
1.0 Build trust relationships with business partners	1=Annual; 2=Quarterly; 3=Monthly; 4=Weekly; 5=Continuously	1=Easy; 3=Moderate; 5=Very Hard	1=Low; 3= Moderate; 5=High	1=Low; 3= Moderate; 5=High
ACTIVITIES	5	3	5	5
1.1 Earn "trusted-advisor" status with dealer principle	INPUTS		OUTPUTS	STANDARDS
1.1.1 Build an understanding of each dealership	<ul style="list-style-type: none"> Dealership contact information List of dealership senior management Dealer principle hot buttons Dealership business plan 		<ul style="list-style-type: none"> Greater influence with dealer principle on topics of mutual interest Input into dealership business plan Stronger position to protect and promote VCI financial interests 	
1.1.1.1 Identify dealership business plan and motivators	TOOLS		CIRCUMSTANCES/COMMENTS	
1.1.1.2 Identify dealer goals	<ul style="list-style-type: none"> Salesforce Dealer file from Region office 		Analyze dealership marketing to see if marketing message aligns with dealer's business goals. The "learn" rating for this activity is contingent on the BDM being of the right temperament – a "people person" rather than a pure analyst	
1.1.1.3 Identify decision-makers for departments and dealership				
1.1.2 Dialogue with dealer principle on strategies to meet goals				
1.1.2.1 Meet regularly with dealer principle to discuss dealership issues				
1.1.2.2 Review progress on goals with dealer principle				
1.1.2.3 Offer business insights and perspectives				
1.1.2.4 Coach dealer principle on how to work effectively with VCI				
1.1.2.5 Build strategies to advance dealer's goals				
1.1.2.6 Have crucial conversations with dealer principle about dealership challenges				
1.1.2.7 Acknowledge dealership success				
1.1.2.8 Notify dealer principle of discretionary incentives to staff				
1.1.3 Support dealer principle's initiatives				
1.1.3.1 Support dealer's special events				
1.1.3.2 Support dealer's community service interests				

- How proficient are you at doing this? (For managers, “how proficient is John...”)

Barrie knew that communication around the survey was key, as the Academy needed to get honest responses. If BDMs thought this was a performance appraisal, the results may be gamed. To help with the messaging, Barrie recruited the support of VCI’s Vice President of Sales and Marketing to create awareness about the upcoming survey. He sent a formal communication to all BDMs and their managers, setting the stage and announcing that the survey was all about improving “the quality and relevance of the training and support offered to BDMs.” This took away the perception of an individual employee appraisal.

The online survey ran for two weeks, with the initial invitation from the VP and three reminders. Having VP backing and reminders proved essential in obtaining a 100% response rate from BDMs and their managers. Barrie even received emails from a number of BDMs saying they found the survey very interesting and asking “how did you get this so right?” They also wanted to see the results. This further reinforced the validity of the map.

Figure 2 shows a screenshot of the survey. In addition to questions about the tasks, the survey included one open-ended question: “If VCI could provide you with one thing that would help you do your job better, what would it be?” The single question yielded tremendous insight and detail into things that were blocking performance.

Interpreting the Data

The consultants coached the Academy to look at the quantitative survey results in several ways:

- Differences between BDMs and their managers
- Differences between high, medium, and low performing BDMs

The consultants computed gaps for each audience by looking at the difference between the percentage of respondents who rated a task as important versus the percentage of respondents who rated themselves as proficient. In other words, if a task is important but you’re not very good at it, it’s a gap. Similarly, if a task isn’t very important, and you’re not very good at it, there is no gap. Survey items were then categorized by BDM performance level (high, medium, low) and the nature of the gap:

1. Manager and BDM concur there is a gap
2. The manager sees a gap; BDM does not
3. The manager does not see a gap; BDM does
4. Manager and BDM concur there is no gap

The first cut of the data holds the proverbial “low-hanging fruit.” These are gaps recognized by everyone and are ripe for a performance improvement solution. The second and third cuts are crucially important as the discrepancy between manager and performer generally indicates a difference of opinion in either the importance of a task or the performance standards of the task. The Academy discovered that high performing BDMs put a much higher priority on some tasks than did their managers, suggesting that these BDMs may know better than their manager how to get the job done. Differences in priorities between high and low performers pointed to possible confusion about prioritization among newer or lower performing BDMs. The fourth cut served to reinforce that these areas were not gaps, and were already being addressed through existing training or BDM selection criteria. Based on discrepancies regarding the “Importance of Task” ratings between high and low

Performance Mapping and Gap Analysis

Figure 2. Screenshot of Gap Analysis Survey

BDM Training Needs Survey

Welcome and thank you for your participation. VCI Academy is continuously looking to improve the quality of their services, and is requesting your input.

Your responses to this survey will tell the Academy what sort of training and performance support will be most helpful to BDMs in achieving success.

This survey includes a series of short items. Each describes a BDM job performance activity. Your task is to assign two ratings for each item: one for importance, one for proficiency.

1. Read each item.
2. Assign a rating to indicate how important you think it is with respect to your job.
3. Assign a second rating to indicate how proficient (competent) you believe you are on this item.

Be honest -- your particular survey will never be shared with VCI management. All responses are confidential and your answers will be combined with those of all other respondents. If you are unable to complete the survey in one sitting, you may close it at the end of any page (after clicking "Next") and return to it later.

Thank you in advance for your thoughtful participation.

Build Trust Relationships with DEALER PRINCIPAL

1. Identify Dealer Principal's business goals and motivators.

	Very Low	Low	Average	High	Very High
Importance of Task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My Proficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Meet regularly with Dealer Principal to discuss dealership issues.

	Very Low	Low	Average	High	Very High
Importance of Task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My Proficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Review progress on goals with Dealer Principal.

	Very Low	Low	Average	High	Very High
Importance of Task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My Proficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

performers, VCI recognized that prioritization of tasks should be explicitly addressed in BDM onboarding training.

The identified gaps formed eight categories of opportunities:

- Become a trusted advisor to the Dealer Principal
- Monitor and build the wholesale business
- Grow ancillary business
- Develop a strategic plan for the district
- Leverage Brand relationships to achieve mutual goals
- Evaluate and improve dealer retail/lease and certified pre-owned performance
- Expand knowledge base
- Manage time

The analysis pinpointed very specific opportunities for VCI. Knowing the size of each gap enabled the Academy to prioritize their plans (and their budget) for closing the largest knowledge and skills gaps first.

BDMs offered thoughtful responses to the mandatory open-ended question (“If VCI could provide you with one thing that would help you do your job better, what would it be?”) Responses reinforced the quantitative findings and supported other issues and themes the consultants had heard during the high-performer interviews. Comments provided rich qualitative descriptions of the issues BDMs were facing in the field. Using textual analysis, themes were quantified into key themes. Below is a sampling of the results in order of frequency of mention:

- Systems and Technology
 - Reports – more accurate, easier to access, more timely
 - Better tools
 - Faster technology
- Communications and Expectations
 - Better field communications
 - Cross-company awareness of “who is the customer”
 - Transparent objectives-setting
- Training
 - VCI systems and reports
 - Ancillary products
- Incentives
 - More pay
 - More contests and bonus programs

Communicating Results

Having quantified the gaps noted in the eight categories above, the Academy was able to easily communicate specific curriculum adjustments and additions. Yet the findings went beyond the specific knowledge and skills gaps. Integrating the maps with learnings from the high performer interviews, the gap analysis, and the open-ended survey question, the consultants saw the story unfolding. To help communicate the findings, they aligned results with Gilbert’s Behavior Engineering Model (Dean & Gilbert, 1997) and Binder’s Six Boxes (2012) (Figure 3).

Categorizing findings in this way quickly communicated that factors other than training were blocking BDM performance. For example, many performers, both in interviews and on the gap assessment survey, complained about inefficient systems and reporting tools, noting the hours it took them to manually compile dealer-facing reports. This resonated in the Systems, Resources, and Tools box. Their request for more transparency around goal-setting and better communication between departments fell right into the Information, Expectations and Feedback box. Also in that box was a politically charged issue related to the legal relationship between

Figure 3. Communicating VCI’s results based on an adaptation of Gilbert’s Behavior Engineering Model (Dean & Gilbert, 1997) and Binder’s Six Boxes (Binder, 2012)

Organization	Information, Expectations & Feedback <ul style="list-style-type: none"> • Transparent setting of objectives • Open communication between departments • Regional support • Clarity around legal relationship between VCI and VW 	Systems, Tools & Resources <ul style="list-style-type: none"> • One system for all reports • More timely and condensed reporting • Mobile-enabled reports • Stable and fast technology • Finance comparison tools 	Incentives and Consequences <ul style="list-style-type: none"> • Higher salary/wage • More sales contests • More bonus pay opportunities
Individual	Knowledge and Skills <ul style="list-style-type: none"> • VCI systems and reports • Ancillary products • Processes • Commercial Risk • Certified Pre-Owned 	Job Fit <ul style="list-style-type: none"> • Strong sales skills • Relationship builder • Focus on interpretation of financial statements vs. analysis 	Intrinsic Motivation <ul style="list-style-type: none"> • A greater sense that what I do is of value • Greater confidence that I do my job well • Greater respect for the work environment

VCI and the VW Brands. Looking at performance gaps in this way opened a lot of eyes, as all of VCI saw how performance improvement solutions needed to go beyond just the training department.

Year One Action Taken

With the robust map in hand, the team set about comparing content in the existing curriculum to the high performer tasks. While many tasks were addressed by existing courses, many were not. The Academy had financial limitations and knew they couldn't develop training for every item. In fact, they didn't know if they even should. What if there were no performance gap on a particular task? The team leveraged the gap analysis to pinpoint those gaps and prioritize where revised or new training was needed.

With evidence in hand, they got to work developing a multi-year BDM curriculum plan. A major year-one initiative called for revamping its financial analysis course. Traditional wisdom said a good BDM must have in-depth financial analysis skills. However, that was not what high performers said. They placed greater value on being able to read and interpret financial statements than on being able to do a deep analysis. The Academy took this finding to heart, and replaced the original, more technical, financial analysis offering with a new course from the National Auto Dealers Association University, titled "Through the Dealer's Eyes." Rather than training the skills to become a financial analyst, it teaches BDMs how to look at financial statements as a dealer would. Today, this is one of the Academy's highest rated courses.

In addition to "Through the Dealer's Eyes," the Academy tackled other significant skill gaps identified in the research and developed several other courses:

- Commercial Credit
- Capitalizing on Profit Opportunity in F&I
- CPO Process
- FinanceSource
- Lease Training
- In-depth Insurance Product Training

Following the first year with the new curriculum, the Academy met with VCI regional management to discuss the BDM certification program (completion of training) for the upcoming year. Typically, this annual meeting included an in-depth discussion about additional training needs and desired certification changes. This time, it was short and to the point, as management said they wanted to "stick with

Performance Mapping and Gap Analysis

what we have now because it's clearly working.” The only requested change was to condense the time to get new BDMs up to speed from 36 months down to 18 months by making live training available more regularly. BDMs and management alike reported that BDMs were getting the training they needed to succeed in their jobs. Certification has become very focused and stable, representing tremendous cost savings to VCI. The Academy no longer needs to build new courses every year, and even more importantly, the seasoned BDMs can stay in the field servicing their dealers rather than taking time out for unnecessary training.

As a result of this initial project, the Academy's approach to performance improvement began going beyond training to involve HR and the business units to address non-training factors that affected BDM performance. For example, several gaps could be closed by improving BDM onboarding content and activities, including task prioritization. The Academy enhanced the initial orientation to require a visit to a regional service center complete with a checklist of people to meet and things to observe while there, providing hands-on learning and enabling the new BDM to build his or her support network.

The project also had challenged thinking about the logical career path for a BDM. Spending time as a credit or financial analyst had been viewed as a necessary stepping stone. It turned out that most high performers were not analysts, but really salespeople. As a result, HR changed the BDM job description, selection criteria, performance management competencies, and career planning accordingly.

Barrie's work set a good foundation for her successor at VCI Academy, Milica Vincent. Vincent had seen the power of using data and analytics to make curriculum decisions and wanted to ensure that the process would continue. She also acknowledged that VW and the auto industry operate in a dynamic environment where change is constant. These changes affect the needs and expectations of the BDMs, calling for periodic updates to the performance map and gap analysis.

Year Three Checkpoint: Performance Map and Gap Analysis Round Two

A benefit of the performance mapping and gap analysis process is its repeatability. Its design facilitates regular refreshes, without starting over from scratch. From the start, the original consultants had recommended a refresh every three years. Back in 2013, the Academy questioned the need and had reservations about funding “the same research” multiple times. However, in 2016, Vincent wanted to know:

- Had VCI closed the gaps?

- Were there different gaps now, given a new hiring profile and expanded workforce?
- Were there new gaps, given changes in the dealer environment and the introduction of new VCI programs?

A Repeatable Process

Now Vincent realized the value of the repeatability of the process. Given the success of the initial project, she was able to sell and gain funding for the refresh. The cost of the refresh was less, as it did not call for the extensive interviewing process required to build the initial map. Rather, it entailed a rigorous virtual review of the original performance map. Paired with subject matter experts, the consultants and the Academy team updated the map to reflect program and process changes.

The team then revised the gap assessment survey to align with the updated map. Once again, communications went out to all BDMs and their managers, and again the Academy received a 100% response rate. Vincent anxiously awaited the results. What would the state of BDM knowledge and skills be three years later?

Results from the new gap analysis showed:

- Eight gaps from 2013 were closed
- Some gaps remained as gaps
- Seven new gaps were identified

The team quickly celebrated the closed gaps, but immediately shifted attention to a crucial gap that remained: Become a trusted advisor to the Dealer Principal. High performers contended that this skill is paramount to BDM success (Figure 4).

Figure 4. Excerpt of comparison of gaps (2013 v. 2016)

2013 Opportunities	2016 Opportunities
1. Becoming a trusted advisor to the Dealer Principal	1. Become a trusted advisor to the Dealer Principal

Tackling Remaining Gaps

To address this gap back in 2013, the Academy implemented two robust, reputable workshops with highly relevant information focusing on dealership operations and finance office culture. Facilitated by former dealer principals and managers, the course received rave reviews and one hundred percent participation. The BDM's managers requested that both courses continue to be offered.

However, the 2016 gap analysis showed this was still a gap. Why? The new courses contained vital information and the instructors were credentialed. Upon deeper investigation, the Academy discovered that a key portion of the training about specific and desired skill sets was vague and left to the interpretation of the learner. Clearly, true learning needs had not been addressed. It was apparent that the Academy had to offer additional training with more targeted, specific solutions and tools.

To address that, in 2017, the Academy launched a new course, "Mind of the Dealer" (MOD). This course specifically focused on providing business advisement for dealers. It was more robust and taught BDMs how to customize approaches to each of their dealers. The investment was costly and its value was initially questioned. But for 2018, all five Region Vice Presidents requested that the Academy design supplemental training to reinforce the MOD content. This was so well-received that, for 2019, an even more advanced MOD reinforcement course was requested. The advanced MOD content provided the framework for regional leaders to tailor and facilitate mini reinforcement sessions at staff meetings. This amazing demonstration of the field teams stepping up and owning the development of their teams speaks well of the performance culture the Academy has been building through its evidence-based curriculum design.

Another original gap that remained involved in strategic planning. In 2013, regional leaders insisted that the Academy need not address this gap. They contended that this work should most appropriately fall to the 10 regional managers. However, the 2016 gap analysis and interviews with BDMs uncovered that, while each regional manager did facilitate district planning meetings, each had their own unique approach. This lack of consistency led to confusion and ineffective measurement, moving strategic planning up to the #3 gap in 2016 (Figure 5).

This time, field leaders were open to an Academy solution and a course was added to the 2016 certification plan. The gap analysis findings triggered an urgency to develop this content in an expedited fashion. Today, the content and tools are fully embedded into the highly touted "Mind of the Dealer" courses.

Figure 5. Excerpt of comparison of gaps (2013 v. 2016)

2013 Opportunities	2016 Opportunities
4. Develop a strategic plan for the district	3. Develop a strategic plan for the district

Figure 6. Excerpt of 2016 gap analysis

Map Ref	Q #	Performance Map Item		% 4 or 5 Importance	% 4 or 5 Proficiency	Gap
Manager Sees Significant Gap (>=20%) but BDM Does NOT						
4.2	30	Execute "IMPACT Selling" to achieve profit opportunities.	Mgr	100.0%	55.8%	44.2%
			BDM	64.3%	52.4%	11.9%

Tackling a New Gap

One of the business process changes implemented since 2013 was the introduction of "IMPACT Selling," a new selling model for VCI. The 2016 gap analysis uncovered a gap in the execution of this process... at least in the eyes of the BDMs' managers. The details of the gap analysis revealed a real problem (Figure 6). Virtually all managers rated the execution of the "IMPACT Selling" process as highly important, and reported low proficiency among their BDMs, resulting in a very large gap (44.2). Yet many BDMs didn't view "IMPACT Selling" to be that important to their job success. In fact, to them, it was not a gap at all – if it's not that important and I'm not that good at it, it's not really a gap.

The gap analysis findings placed a new spotlight on "IMPACT Selling," causing the Academy – and VCI – to re-evaluate the whole sales process.

- Is it an effective model?
- Is it the best model?
- How relevant is it to the industry?

Research into other sales processes revealed that most selling models share many elements common to "IMPACT Selling." The Academy conducted interviews with BDMs across the country who offered positive reviews of the "IMPACT Selling" course content. Additional probing, however, uncovered the real problem: back at the regional offices, there was very little discussion about applying "IMPACT Selling"

Performance Mapping and Gap Analysis

once the training was completed. BDMs equated this lack of management interest and reinforcement with a general sense that “IMPACT Selling” was unimportant. It seemed managers expected the BDMs to take initiative and apply these sales skills and sales process without any further guidance, support, or reinforcement.

The gap analysis shed light on this problem, and managers came to realize the important role they play in reinforcing and embedding training concepts into the daily work. They realized *it was their job* to make “IMPACT Selling” part of the culture and to reinforce its use. Since 2017, the Academy has seen a dramatic increase in requests for “IMPACT Selling” workshops and renewed enthusiasm for its relevance. One regional team has plans to re-run the workshop as a refresher for the entire region in 2020.

Collaborating on Non-Training Issues

In 2013, BDMs raised the flag around a major impediment to their productivity: VCI’s confusing systems and poor reporting. Though many comments called out reporting issues in the 2013 findings, no action was taken to evolve the quality of reporting between the 2013 and 2016 studies. When, in 2016, the Academy again surfaced it as a key issue, the business was ready to take action. The VCI reporting team stepped up and uncovered features within their Customer Relationship Management (CRM) tool that made great inroads in providing much more robust reporting including an online, real-time dashboard. VCI management also imposed stricter guidelines around month-end close dates, which resulted in a more “real-time” view into the data. Having better data led to increased scrutiny by regional managers which in turn has led to greater collaboration between BDMs and their managers and improved accuracy of reporting.

A Valued Curriculum

Actions taken because of the 2016 findings drove further enhancements to the BDM certification curriculum. Today it is a highly refined and specific learning and development path. This path resides in VW’s learning management system and is available to employees throughout the company. Employees aspiring to the BDM role often start here, before applying, to better understand the job and to determine if the role is the desired fit. Especially rewarding for the Academy are newly promoted BDMs who contact the team offering thanks for the robust training that help them prepare for a successful interview – and for a successful start in their new position. The real benefit for these new BDMs is that they start their new job already well-

trained. This enables them to get right to work, spending less time in training and more time with their dealers, building vital relationships, and delivering business results.

YEAR SIX CHECKPOINT: PERFORMANCE MAP AND GAP ANALYSIS ROUND THREE

The Academy already has plans for its next update to the BDM performance map and gap analysis. The map will be scrutinized by SMEs, and the gap assessment survey will be deployed. Vincent remains keen on knowing:

- Has VCI closed the gaps?
- Are there different gaps now, given a new hiring profile and expanded workforce?
- Are there new gaps, given changes in the dealer environment and the introduction of new VCI programs?

Vincent does not take lightly the challenges of gaining recurring funding for such research. VW, like all automotive manufacturers, is extremely sensitive to the risk of another automotive industry crisis. At VW, the discipline about budgetary decisions is more rigorous than ever. As such, budget allocation at VW is prioritized based on alignment to business results. This includes funding for learning and development.

The success the Academy experienced resulting from the 2013 and 2016 BMD Performance Map and Gap Analysis led to actions totally aligned with business results. The company now believes in this evidence-based process and is committed to allocating future budget for continued work involving map and gap analysis updates, including the upcoming 2019 work. In addition to conducting this work for the BDM job role, the Academy will be conducting its “Round Two” research in 2019 on another key job role: Finance Manager.

These investments clearly demonstrate how VCI Academy has used an evidence-based approach to design, develop and deliver performance solutions that drive valued business results for the organization.

CURRENT CHALLENGES FACING THE ORGANIZATION

Tackling curriculum improvements is relatively straightforward for the Academy. Changes are largely within their own domain. The non-training issues are, by their nature, more systemic and broader reaching. The findings from both 2013 and 2016 identified some serious barriers to performance that present organizational challenges to VCI. One, the systems and reporting issue, continues to be a productivity drain on BDMs. While inroads have been made (as noted above), further reporting enhancements are still on the radar. Managers share that, in spite of improvements in the system, BDMs are still learning all the possible reports available within the CRM. There seems to still be a gap in determining which report to use for what, and more importantly, what run-time parameters to enter to customize reports for the specific needs of each specific dealer. Vincent and the regional managers are eager to see how the BDM responses to the 2019 Gap Analysis will differ from the 2016 research when it comes to the reporting questions.

Another issue, largely unspoken until this project, is the natural tension between the finance arm (VCI) and the Brands (i.e., Volkswagen or Audi.) Federal law prohibits collusion, creating a fine line for cooperation between the BDM and the VW or Audi field representative. BDMs requested clarity around expectations and boundaries. The Academy has helped to surface this broad organizational issue. They also recognize that VW and VCI leadership needs to step in to help BDMs – and others in both companies – to navigate these waters.

The Academy stepped up and aligned the BDM certification with job success. It will take strong advocacy to drive for the removal of these other performance barriers. The challenge is: who is the advocate? Who, beyond the Academy, owns performance at VCI? There is growing evidence that, at VCI, performance is becoming everybody's business.

SOLUTIONS AND RECOMMENDATIONS

The Academy acknowledges that having quantitative evidence has helped bring broader organizational issues to light. It makes discussions more objective and productive. Rather than treat this as a “one-time project,” the Academy is committed to repeating the process every three years and using the findings to keep curricula relevant and to uncover and remove performance barriers.

Performance Mapping and Gap Analysis

Unlike too many “research projects” where nothing happens, the Academy has leveraged its results and taken serious action. They also make it known at every opportunity that the changes are based on BDM input. By uncovering the issues that are truly blocking performance, the Academy has positioned itself as an advisor to the rest of the company. Leading with quantitative evidence, VCI Academy has gotten the attention of executive leadership and has presented facts that cannot be ignored.

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KEY TERMS AND DEFINITIONS

BDM: Volkswagen Credit's Business Development Manager; the individual who sells VCI products and services to VW's dealer body.

Behavior Engineering Model / Six Boxes: The Behavioral Engineering Model (originally presented by Thomas Gilbert in 1978) and the Six Boxes Model (Carl Binder's practitioner revision of the BEM) present the variables affecting performance, categorized by environmental and individual factors. This model extends thinking beyond traditional skills and development.

Bloom's Taxonomy: A hierarchical classification of levels of intellectual behavior that represent the goals of the learning process.

Captive Finance Company: A subsidiary whose purpose is to provide financing to customers buying the parent company's product. In the automotive industry, their services include providing financing to consumers and dealerships. A captive finance company can be a source of significant profits for the parent organization.

Gap Analysis: A survey of job performers and their managers that investigates, task by task, the relative importance of each and the performer's proficiency at each. The term is often used to encompass both the survey and the analysis of the data.

High Performer: Individuals who consistently perform at high levels as determined by objective measures.

Performance Gap: A quantified gap on a particular task, computed as the difference between the percentage of respondents who rated a task as important versus the percentage of respondents who rated themselves as proficient. In other words, if a task is important but performers not very good at it, it is a gap.

Performance Map: A performance-based task analysis for a particular job function that starts with a definition of measurable success, as defined by high performers in that job. Each task is written using observable, action-oriented verbs. For each task, the map also includes inputs, outputs, tools, frequency, risk, and difficulty to learn. Performance maps often form the foundation for a curriculum plan and can be the basis for a gap analysis.

Chapter 2

Building Performance Systems That Last

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EXECUTIVE SUMMARY

LIFTOR is a human performance system that promotes the safe and efficient operation of industrial forklift trucks. The original installation occurred in 1985. In the ensuing 30 years, it was installed at 16 sites. In spite of meeting its design goals, not all of these installations have survived, but because the same problem existed, and the same system was used to solve it, we can attribute the failures to differences between the sites. Some sites were closed for reasons unrelated to LIFTOR. Others failed because of systemic conflicts, but most of them failed after specific events occurred, such as new managers, new budgeting or contracting policies, or loss of support from corporate headquarters. Most of them could have been prevented by relying less on a corporate champion, and more on good cost-effectiveness reporting, coupled with more systematic training and involvement of front-line managers.

DOI: 10.4018/978-1-7998-0054-5.ch002

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ORGANIZATION BACKGROUND

Introduction

National LIFTOR (LIFT Truck Operating Resources), is one of the most thorough and comprehensive industrial performance management systems (PMS) in existence. Yet, of the 16 original installations on record, many failed prematurely. Others continued to work, original mission intact, for nearly 30 years. Which factors caused these differences? What are the implications for the design of performance management systems in the future?

A Performance System Analysis: LIFTOR Success and Failure

The LIFTOR performance management system did not start out as such. It evolved from a performance-based training initiative in one factory & distribution center. With successive installations, it took more than 20 years of continuous refinement before we could confidently explain any accident or failure in performance as a failure to follow one or more standardized LIFTOR practices. At that point, the LIFTOR performance system had become a truly comprehensive performance system!

Figure 1 is a summary of the LIFTOR installations in our study.

It's in the Same System, Different Sites

The above analysis covers 30 years at 16 different industrial sites across four different states (USA), with 1923 forklift operators. From this analysis, we have learned about successful implementations and also about the reasons for failures of the LIFTOR system. The success of this system is well-documented (Monaco and Schneider, 2015). Here, the authors observe key reasons for failures and explain them along with recommendations for future installations. All of this is possible because LIFTOR has been implemented uniformly as a standardized system. By comparing sites with different working environments, we can make valid inferences about the causes of both successes and failures.

Classifying Outcomes

Over the collective 153 site-years of their existence, these sites trained and certified 1923 forklift operators to LIFTOR performance standards. Classifying the sites by the proximal cause for their demise, we see that:

Building Performance Systems That Last

Figure 1.

Site	Years in operation	# of certified operators	Reason for discontinuing LIFTOR
1	20	128	Operation expanded, moved to two other buildings
2	10	67	Operations moved/expanded into new factory
3	12	147	Operations relocated to another site
4	5	73	LIFTOR contract not renewed by Plant Manager to reduce costs
5	3	38	Discontinued by Factory Manager when Corporate HR stopped financing it.
6	2	99	Discontinued when new Logistics Director prohibited on-truck training and testing. Replaced by classroom-based training, provided by contractor.
			Discontinued when LIFTOR

- Four (24%) were closed by the company, for reasons unrelated to LIFTOR.
- Four (24%) discontinued LIFTOR when new plant managers took control.
- Four (24%) discontinued LIFTOR because existing local management failed to support it operationally.
- Three (18%) stopped using LIFTOR when the corporate champion for the system retired.
- Two (12%) discontinued LIFTOR to cut costs from local operating budgets.

Corporate innovations of all sorts often fail to endure past 3-5 years after implementation. They never become institutionalized as intrinsic aspects of the corporate culture (Trompenaars and Hampden-Turner, 1997) but remain in the “flavor of the month” mindset of the company’s middle managers. LIFTOR had notable successes, making converts among corporate champions, forklift operators, and front-line managers. But there were a number of aspects of the implementations that left it vulnerable to termination. Among them:

1. Site managers making false comparisons between typical classroom-based “forklift safety training” and the LIFTOR performance system.
2. Managers believing “safe operation” and “rapid operation” to be opposing goals.
3. Reliance on a champion for year-after-year funding and endorsement.
4. Proponents failing to cost-justify the LIFTOR Performance System annually.
5. Local managers ignoring LIFTOR Performance System Policies.
6. Continued reliance on “outside consultants” to maintain certification of operators

Each of these deserves a detailed explanation.

Conceptual Confusions

Directly comparing LIFTOR to the typical “training” provided by equipment dealerships, external training companies or in-house professionals. It is true that LIFTOR replaces these types of training, but it does a lot more, which places it at a disadvantage if the additional benefits are ignored. Typical training, designed primarily for OSHA compliance, is cheap, fast, one-shot, and fails to provide adequate hands-on truck practice. It will always be a less-expensive option to a performance-based system. If there is nobody acting as LIFTOR champion, cost-cutting pressures will take their toll sooner or later.

Confusing the effectiveness of a performance system with the inherent absence of casualty risk. Managers who have experienced the consequences of a serious forklift accident appreciate the need for LIFTOR, while subsequent managers without that experience tend to underestimate the inherent likelihood of an accident because LIFTOR has been effective in reducing that risk. Knowing nothing but what they see when they arrive, the LIFTOR system looks like a “pet project” of previous managers, and an excessive expense, in view of the lack of recent forklift incidents. Ironically, to the naïve manager, the better LIFTOR is performing, the more likely it will appear superfluous.

Seeing a false dichotomy between “safe operation” and “rapid operation”. While this view may be justified in situations that require multiple employees to control traffic or “spot” structural components being raised by a crane, forklift operations in a controlled-access warehouse do not require extra steps beyond those recommended by the equipment manufacturers. Other than consulting industrial engineers, there are no extra workers whose only concern is safety. LIFTOR demonstrates that precision forklift operation can be *both* safe and efficient. Even if a site has a perfect safety record, installing the LIFTOR system can improve productivity by training and

motivating operators to be precise in their load placements and truck movements. Mastery requires both precision maneuvering of the forklift AND appropriate speed.

This finding runs counter to the attitude of most managers who anticipate an adversary relationship between the operations manager and the safety engineer. Managers have encountered forklift operators who try to explain away their sub-par performance by claiming that they are working slower to be safer. The thinking seems to be: “To be safe, I will operate my forklift slowly...and my supervisor will not dare to oppose my attempts to be safe.” LIFTOR directly contradicts this idea.

Expecting workers to autonomously maintain high levels of performance, once they have been trained. Warehouse managers tend to assume that everybody is working to standards until it becomes obvious that they are not. Yet they have before them the example of the coach of their favorite football team, who paces the sidelines and concentrates on every play. LIFTOR explicitly incorporates performance testing and monitoring, but managers who haven’t been trained as operators themselves are uncomfortable insisting on performance standards that they can’t meet personally.

Any system that uses feedback and testing to maintain performance requires sustained effort and involvement by front-line managers. LIFTOR is not a “Band-Aid” to cover a history of accidents nor is it a “flavor-of-the-month” management fad; it is a permanent change in the way the work is accomplished. If a worker cannot pass the LIFTOR on-truck performance test after multiple attempts, that worker doesn’t drive forklifts – *ever*. By the same token, if the front-line manager cannot or will not enforce LIFTOR policies, the manager is reassigned out of the warehouse or terminated.

Reliance on a Champion for Continual Support, Year-After-Year

Any initiative in a company large or small starts with one person’s idea or proposal and goes forward because of their personal efforts. In his essay on self-reliance, Emerson (1894) wrote:

A man Caesar is born, and for ages after we have a Roman Empire. Christ is born, and millions of minds so grow and cleave to his genius, that he is confounded with virtue and the possible of man. An institution is the lengthened shadow of one man...

When we rely on a champion to produce lasting change, we are hoping that Emerson was right. This was our hope for LIFTOR because it is not a one-time project – it requires a permanent change in how forklift trucks are used throughout the company. It quite properly requires active permission and support from the organization’s leadership (Simon, 2006). While that support is crucial when the

system is first implemented, indefinite reliance on a champion becomes the system's Achilles heel when its champion is reassigned or retires.

This has been true for LIFTOR. After 30 years, the constant LIFTOR Champion announced his retirement and local managers allowed LIFTOR support contracts to expire. There were other interim champions at the various industrial sites. Over time they were promoted or transferred, to be replaced by new managers. The LIFTOR system faced eradication in each case but was rescued by the corporate Champion. In his role as Vice-President, he dictated policy across his division and ensured the local budget so the LIFTOR system could stay in place.

He was always supportive, and frequently inquired as to the status of LIFTOR's success in training and certifying the skills of workers and supervisors. Of course, our Champion relied on support from his own superiors, but that changed when his superiors were reassigned and the chief corporate safety officer unexpectedly retired. Subsequently, the Champion announced his own retirement. Within months, most LIFTOR activity evaporated, except for a few die-hard local managers who tried to maintain their LIFTOR success without the benefit of budget or professional support.

For the entire 30 years, LIFTOR relied on *the lengthened shadow of one man*. The LIFTOR performance system existed because of the Champion's enthusiastic personal interest, and it continued for the same reason. He was charismatic. He was an effective leader. He had budget clout. With this champion, LIFTOR needed no other justification. In a very real way, this total reliance sowed the seeds of the system's eventual demise at this company, in spite of the system's success in fully meeting its objectives!

What we now realize is that we failed to design in a necessary transition from reliance on the champion to reliance on the systemic business practices, much of which already existed and caused the company to be an ongoing success in its industry. LIFTOR failed to integrate with the normal business culture but operated alongside it. LIFTOR was a parallel system that endured artificially for as long as its Champion was present and believed it had value to the company.

Failing to Cost-Justify the Performance System in Every Budget Cycle

In every for-profit organization, there is constant pressure on managers to cut costs. Several features of LIFTOR make it highly susceptible to cost-cutting initiatives:

- It has recurring costs for performance monitoring and testing
- It requires documentation, adding to the workload of front-line managers

Building Performance Systems That Last

- The more it prevents injuries and accidents, the more it looks like it isn't needed
- It relies on a contracted external consultant for installation and maintenance
- There are less expensive methods that will keep the site in compliance with safety regulations without requiring LIFTOR's comprehensive performance testing.

To defend itself against these pressures, LIFTOR must be prepared to cost-justify itself whenever plant funding is being reviewed.

Without the Champion's discretionary budget allocation, LIFTOR, with its comprehensive approach to forklift safety, wouldn't have happened. In fact, many prospective new installations were never started because the head engineer or accountant would insist on economic analysis to cost-justify the installation – a normal requirement in most companies. When the LIFTOR consultant would offer to do the study, he invariably would be denied the historical safety incident and cost data needed. This would remain a conundrum until LIFTOR was able to unite safe (precision) forklift operating with productive (appropriately fast) forklift operating.

Taking a long-term view, there is little point in installing LIFTOR without the ability to show that it would be financially advantageous, all costs considered. (Harless, 1990) So, LIFTOR now insists that prospective clients compare the cost of installing and operating LIFTOR for a minimum of 3 – 5 years after installation to the costs incurred in the equivalent (3–5 year) baseline period, immediately prior to LIFTOR.

The costs must include:

Baseline Costs

- Operator training
- Lift truck maintenance & repair
- Damage to the physical plant
- Damage to merchandise
- Lost-time accident costs
- Operator throughput (avg. time/pallet)
- Operator replacement cost

LIFTOR Costs

- Operator training
- Supervisor & examiner training
- Consulting services
- Lift truck maintenance & repair

- Damage to the physical plant
- Lost-time accident costs
- Operator throughput (avg. time/pallet)

Operator replacement costs

A three to five-year analysis is necessary to capture costs of infrequently occurring events, such as lost work-time accidents and damage to warehouse racks and dock equipment. These events involve significant expense; when they occur during the baseline period but not in the LIFTOR period, they easily offset the additional LIFTOR training and testing costs which the baseline never incurred. Annual LIFTOR training and testing costs will always be higher than conventional operator training, so any attempts to compare just training costs without including results from better forklift operating and management practices must be nipped in the bud.

Because LIFTOR requires daily/shift examinations of every truck, worn and broken trucks are taken out of service and repaired before they can cause accidents. If the trucks are in poor condition, repairing all the deferred maintenance items will frequently trigger a decision to replace the older trucks with new ones, so subsequent maintenance costs are reduced. It is vitally important that the capital expense of new trucks be excluded from this analysis of operating costs. If the client decides to continue with the existing trucks, the cost of “catch-up” repairs must be attributed to the baseline period, even though they are incurred during the LIFTOR installation.

Measuring Operator Productivity

Most of the items in the cost analysis can be obtained from the client’s financial records. The exception is measuring forklift operator productivity. Gross measures that take all the forklift operator’s salaries and benefits and divide that amount by the total number of pallets moved in and out of the warehouse during the year include too many unrelated activities, such as vacations, unplanned downtime, and other tasks besides operating forklifts. They fail to measure internal “moves” within the warehouse, a significant portion of operations. A much finer-grain analysis is necessary for several reasons, the most obvious being that the “noise” of unrelated activities will mask pre versus post differences in operating productivity. The less obvious reason is that LIFTOR operating policies are fine-tuned for each site. Different trucks, different warehouse racking systems, different loading dock configurations must be taken into account when defining how trucks can be operated safely under those conditions. Only by observing and measuring existing operations prior to implementing LIFTOR can these factors be properly determined.

Building Performance Systems That Last

There is a third and even less obvious reason: by measuring individual operator productivity during the baseline period, LIFTOR can calculate the variability in productivity between operators. By defining “best practices” and then training and managing actual performance to them during LIFTOR installation, operator variability is considerably reduced, which boosts the average productivity figures. This method, called “Performance Improvement Potential” analysis – was originally developed by Thomas Gilbert (Gilbert, 1979). At sites where this analysis was performed, LIFTOR was able to demonstrate productivity gains of 20% to 30%.

Updating the Report Annually

Once the initial cost analysis is completed, it should be updated in successive years by adding the average annual baseline cost to the previous year’s cumulative baseline costs and adding the current annual costs to the cumulative LIFTOR costs. In this way, the cost analysis remains current and comprehensive, and it will reflect greater savings in later years, as start-up costs are fully amortized.

Whenever budgets are being decided, the current cost analysis must be in the hands of the deciders. As the years go by, the absence of accidents and the reduced cost of repairs will give LIFTOR a greater and greater cost advantage. Some detractors may attempt to refute the cost analysis by suggesting that the baseline data have become “ancient history”, but they will have only their suppositions for support if they believe that discontinuing LIFTOR will take them to any situation other than back to the original baseline conditions.

Local Managers Ignoring LIFTOR Policies

A number of sites discontinued the LIFTOR system because the local managers didn’t want to have it in their workplace. One or two were overt, saying they only tolerated it because of its corporate mandate. Others resisted passively, taking no interest in any aspect of the system. One possible cause may have been the external consultant, who trained and tested the manager’s subordinates. Another may have been suspicions that the consultant served as “eyes and ears” for the corporate champion who supported him. When that champion retired, three sites took the opportunity to immediately discontinue LIFTOR.

Continued Reliance on “Outside Consultants”

Because LIFTOR is a radical departure from conventional warehouse management, it has required a highly experienced consultant to install it and maintain its records. But continued reliance on a service supplied by an outside contract prevents the System from becoming fully institutionalized. The System must be administered locally – it must be self-sufficient – to become part of the operating culture. At some point, the consultant must stop being a routine part of the system, and transition to becoming just a resource, to be called in only if the system breaks down, there is a serious forklift-related injury or other catastrophes. The consultant isn’t the right person to manage this transition; it should be decided by the local management, with concurrence from the corporate Champion.

The current LIFTOR system has automated some of the consultant tasks (printing customized training material, testing checklists, certification cards, and certificates, keeping government required records, etc.), and local managers now have immediate Internet access to the most-used LIFTOR resources. These changes encourage local management commitment to institutionalize LIFTOR practices and reduce recurring consultant costs.

Resilience as a System Design Goal

The LIFTOR system has yet to fail because of environmental changes at a site. It was designed to accommodate changes in the type of lift trucks in use, the type and capacities of pallets or containers, the rack system configuration, traffic flow patterns, loading dock configuration, and the arrival of new lift truck operators. These aspects of the work environment are changed frequently; without this built-in resilience, the System would have been thrown out with the discarded equipment. Tweaking the system to accommodate such changes have required the assistance of the original outside consultants because their design skills are necessary to modify the operating procedures. In this case, resilience is more important than self-sufficiency.

SUMMARY AND CONCLUSION

The LIFTOR performance management system successfully achieved continuous improvement in lift truck productivity and safety. Since 1985, the System has endured with its original mission intact. Yet, even though it lasted 30 years in one company’s industrial sites, it eventually met its demise there. Given the LIFTOR performance system had built-in methods for learning and adapting to 30 years’ worth of changes

Building Performance Systems That Last

in its environment, why was it shut down? Some LIFTOR installations ended within 3 - 5 years after onset. Our analysis suggests two important design considerations for installations of any human performance system:

1. How long is the performance system expected to last (durability)? Who decides when its time has come?
2. Which operating policies must be in place before the performance system becomes operational?

DURABILITY

The design documents of every performance system should address the issue of discontinuing the system. When will it no longer be needed? Who will decide when that circumstance has arrived? It is not enough that as the system is well-designed, and that continuous learning guides its success throughout the years. External factors unrelated to the operation of the system have the ability to cause its premature demise. These factors should be anticipated, and contingencies should be in place to counter them.

ESSENTIAL POLICIES

There are six essential policies that emerged from our analysis of LIFTOR's lifecycle at various sites. They are:

1. Managers at all levels must respect the critical distinctions between a performance system and a conventional training system. They must base their decisions on results, not just costs.
2. A corporate champion is crucial when a performance system is first installed, but continued reliance for year-after-year funding and endorsement ties the fate of the system to the tenure of the champion. That said, the champion should ensure the integrity of the system by making periodic site visits.
3. The system must be able to justify its costs by the value of its results. Pre-system costs and results must be compared to post-system costs, not to alternative solutions. The cost figures must be updated and reviewed as part of each budgeting cycle.
4. Operators who chronically fail to meet the system's performance standards must be replaced.

5. Local managers who chronically fail to promote and enforce system policies must be replaced.
6. Outside consultants are necessary for system installation, but their continued involvement, other than as on-call resources, will inhibit the system from becoming part of the site culture.

Designers of other performance systems may discover additional policies to add to their lists, but we doubt that they will implement durable performance systems without adopting all of the above.

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KEY TERMS AND DEFINITIONS

Accomplishment: A thing of value to another person using it to perform their job. Operators produce accomplishments and use them to signal or “influence” the behavior of others.

Behavior: Any action that can be seen or measured in some other way.

Front-End Analysis: A method to determine the gap and cause of performance problems in behavior before interventions are selected or implemented; a method to uncover the underlying causes of poor performance.

Influences: Any condition, antecedent, or event that is both recognized by an operator and causes him/her to act in a particular way.

Organization Objectives: High-level accomplishments that can describe the organization’s purpose in service to its customers. Can also be used to describe the accomplishments of departments, or other work groups with a common purpose.

OSHA: Occupational Safety and Health Administration agency in the United States that serves as the main federal agency responsible for the enforcement of safety and health legislation.

Systems Theory: Theory that holds that systems in nature are holistic, interconnected and interdependent. If a change occurs in one part of a system, other parts of the system are affected as well.

APPENDIX: QUESTIONS FOR DISCUSSION

1. Suppose you are attempting to install a corporate-wide performance system, what criteria would you use to decide what would make an effective Champion.
2. You are attempting to install a performance system and your client is resisting the notion of conducting a baseline cost and performance analysis. What arguments would you make to convince the client of its necessity?
3. You are installing a performance system and a local site manager protests the increased costs and effort that will be required when compared to the conventional training that it replaces. What will you do to persuade him the performance system is worth supporting?
4. For a performance system you might install at your organization, consider the following list of costs. What is your rationale for including or excluding each from your baseline economic analysis?
 - a. Worker's Compensation
 - b. Legal costs
 - c. Warehouse throughput
 - d. Average Hourly Wage
 - e. Waste or rework costs
 - f. Customer satisfaction survey results
5. If a new local site manager is hired, what role should the champion be expected to take in the new manager's on-boarding? What role for the outside consultant? To what extent are these roles depending on how long the performance system has been in place?

Chapter 3

The HPT Model Applied to a University Technology and Learning Center's Resource Allocation

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EXECUTIVE SUMMARY

The International Society for Performance Improvement (ISPI) Human Performance Technology model was used as a guideline for this case study and applied to assess and evaluate the resource allocation at the Technology and Learning Center (TLC). This model has proven to be a useful guideline as a process to be followed during the project. A team of instructional systems technology graduate students served in a consulting role on this project to help the TLC allocate resources and redesign processes on how support tickets were handled. The project team conducted performance analysis through extensive stakeholder interviews and extant data review to perform organizational, environmental, gap and cause analysis. Through these analyses, performance issues were isolated, the causes behind them were identified and concluded with the recommendation of interventions to the client.

DOI: 10.4018/978-1-7998-0054-5.ch003

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ORGANIZATION BACKGROUND

The Technology and Learning Center (TLC) at this southeastern higher education institution in the United States provide pedagogical support and pedagogy-related technical support to faculty and students.

The Organization, Mission, Vision, and Goals

The TLC was analyzed for its organizational structure, mission, values, and goals. The vision, mission, values, and goals of the TLC are posted and updated on the TLC website. The center conveys these to the employees and exhibits them in their daily practices. The goals of the TLC and the individual team member duties were aligned with the overall mission, vision, and values of the TLC. The strategic goals of the Center provide great value to the faculty, students and the learning culture of the University as a whole (Table 1).

Organization Structure and Key Stakeholders

The Technology and Learning Center is a department within Information and Technology Services and consists of two teams: The Technical team and the Instructional Programs team. The Technical Team is headed by the Manager of Technical Systems while the Instructional Programs team is headed by the Associate Director of the TLC. Both of these positions report to the Director of the TLC.

Technical Team

The Technical Systems Team answers technical questions from faculty passed on from the university service helpdesk. This is considered as Tier 2 service desk tickets. Any issues that the Technical Team is unable to resolve is forwarded to the Instructional Programs Team. The Technical team consists of an eLearning Applications Developer, Web Application Analyst and 1 Instructional Technology consultants. The Instructional Technology consultant handles all Tier 2 support issue resolutions and escalation of pedagogy related tickets from Tier 2 to Tier 3. The Technical team supports the management of the technical aspects like the implementation, basic functions, maintenance, testing and upgrades of academic technologies like the Learning Management System, the applications associated with Learning Communities and other miscellaneous collaborative or teaching/learning initiatives. They also support in the resolution of Tier 2 support ticket escalations from the Service Desk which is a separate department in the Client Engagement

The HPT Model Applied to a University Technology and Learning Center's Resource Allocation

Table 1. Organization mission, vision, values and goals

VISION	<p>The Center for Teaching and Learning:</p> <ul style="list-style-type: none"> ● Is an integral part of the success of the University. ● Is a leader in the innovative use of scholarly research in teaching and learning. ● Defines best practices in professional development that ensure quality course design through the effective integration of technology and innovative teaching strategies. ● Is an unwavering advocate of a diverse, open learning environment which fosters active collaboration among all members of the Academy.
MISSION	<p>The Center for Teaching and Learning enhances the University's mission of teaching and learning excellence, provides enterprise level instructional technologies, and champions the advancement of scholarly teaching. Major priorities include:</p> <ul style="list-style-type: none"> ● Providing professional development opportunities to ensure constructive and active learning environments. ● Leveraging the experience and wisdom of faculty leaders to promote teaching excellence. ● Encouraging innovative research and scholarly publication on teaching and learning. ● Identifying, developing, and sustaining enterprise level instructional technology systems. ● Collaborating with campus constituents to assess programs, tools, and services that support their teaching and learning needs. ● Contributing to the development of policies, initiatives, and Campus-wide culture that supports excellence in teaching.
VALUES	<p>What the Center for Teaching and Learning value as an organization:</p> <ul style="list-style-type: none"> ● Mutual Respect ● Academic Integrity ● Diversity ● Inclusion and Accessibility ● Open Communications ● Collaboration and Teamwork ● Continuous Learning ● Innovation ● Academic Excellence ● Customer Service
GOALS	<p>The Goals and Objectives for the Center for Teaching and Learning:</p> <ul style="list-style-type: none"> ● Transform student learning experiences by providing professional development opportunities for faculty and graduate teaching assistants. Examples would include interactive workshops, online self-paced instructional materials, online pedagogy and so on. ● Promote best practices of teaching excellence in both traditional and online pedagogy of teaching and learning. ● Develop and expand the Scholarship of Teaching and ● Identify, develop, and sustain enterprise level instructional technology systems. ● Collaborate with campus constituents to support the university's strategic teaching and learning initiatives.

division within Information and Technology Services via phone and/or email. Finally, they escalate pedagogy related Tier 2 tickets into the Tier 3 category that is handled by the Instructional Programs Team.

Instructional Programs Team

The Instructional Programs Team provides direct consultation services (via phone calls, emails or drop-in visits) and is considered as Tier 3 service desk tickets. They are also responsible for conducting training and learning workshops for faculty on various instructional topics such as the aspects of learning management systems. The Instructional Programs team has 2 Instructional Designers and 3 Instructional Technologists. The team supports the professional development of faculty members around teaching, academic technology, and pedagogy. They also support in the resolution of pedagogy related Tier 3 support ticket escalations from Tier 2 (handled by the Technical Team) via phone, email and/or face to face consultations. The final stakeholders in this scenario are the faculty members and the students who interface with the teams via phone calls, emails and face to face or drop-in consultations. Both faculty and students can contact the Center directly via phone, email and/or visits to the physical location. They can also be routed to the Center via the Service Desk in cases where the Service Desk is unable to resolve the academic technology related issue. However, it should be noted that faculty and students only do face to face consultations with the Instructional Programs team. The Instructional Technology consultants in the Technical team typically do not provide face to face consultations and only interface with student/faculty via phone and email.

Service Desk

The Service Desk is another department within ITS and handles drop-ins and direct support calls. The Service Desk is considered Tier 1 and consists of a student service desk (manned by student workers, teaching and graduate assistants) and a faculty help desk (manned by full-time employees). Tier 1 includes 4 full-time employees and 1 full-time temporary employee. Along with teaching assistants, there are a total of 30 employees with a total of 6 (both student and faculty help desks) working at any given time. The skill level is based on how much technical background is carried by each individual, especially in the case of the student workers who respond to support calls. There are also technical assistants whose skill level only includes helping basic student inquiries.

SETTING THE STAGE

We conducted interviews with the stakeholders, visits to the campus, and reviewed extant data to perform an environmental analysis.

Environmental Analysis: The Workplace, Worker and Work Analysis

Workplace

The TLC includes several individual office spaces, meeting rooms and a large open communal meeting area (designed to hold workshops). Upon entering the office itself, the Administrative Assistant's desk is located near the entrance so she is able to greet and guide visitors immediately upon entry. Each team members have their own designated office space with amenities (like office walls that double as whiteboards) within which to conduct support functions, face to face consultations and project work without any interference from activities occurring outside.

Worker

The Technical Team. The Technical team consists of an eLearning Applications Developer, Web Application Analyst and 1 Instructional Technology consultants. All the employees and management have the required skills, knowledge, ability and motivation to successfully perform their duties. The primary responsibility of the consultant is to handle Service Desk Tier 2 ticket escalations. Ticket volumes can vary from 25/30 a day during peak times like beginning or end of semesters to 30 a week during off-peak times. The general observation has been that the student tickets either contain incomplete information or does not accurately reflect the issue involved. The consultant investigates the ticket, contacts the faculty/student and works with them to resolve the issue. The consultant enters content into the FAQ support page and directs faculty/student to the support page or to how-to guides whenever possible. The consultant only does email and phone consultations. Excess workload and only 1 consultant renders face to face consultations and IP team collaborations unfeasible. It also poses challenges during software testing. The workload has been such that tickets that take too much time to resolve are also being routed to Tier 3. The general agreement is that the technical team does not have the resources to conduct their functions efficiently.

Worker

The Instructional Programs team: The Instructional Programs team has 2 Instructional Designers, 3 Instructional Technologists, and a graduate assistant. The Associate Director of the TLC heads the IP team. All the employees and management have the required skills, knowledge, ability and motivation to successfully perform their duties.

The Center lacks a well-defined procedure to handle drop-ins and direct support calls and both of these are a source of interruptions for the team members. The Center also has no clear definitions for Tier 2/Tier 3 tickets and a loose process for handling ticket escalations from the Technical team. These ticket escalations are done via email and ticket information is entered into a communal Excel document. Members investigate and resolve issues via email, phone calls or face to face consultation. Members agree that Tier 3 issues by nature require face to face consultations and typically cannot be handled remotely or via phone/email. Members noticed Service Desk tickets with incomplete information or escalations that could have been handled at Tier 2. However, they agree that the Technical Team is too understaffed and overloaded to handle all Tier 2 tickets.

Work

The TLC receives both faculty members and students who schedule appointments or drop-in at the center seeking support on academic technology related issues. As mentioned earlier, the TLC houses both the Technical team and the Instructional Programs team but only the Instructional Programs team receives drop-ins and appointment visits. The instructional Program team members schedule their own time for appointments while drop-ins at the Center consult with the first available team member. The Administrative Assistant has access to each member's calendar and determines who that team member will be. The TLC receives on average about 3 to 4 drop-ins per day and each drop-in consultation time can vary from 30 minutes to an hour depending on the issue being discussed. The Center is open from 8-5 every day and allows visitors throughout its working hours. The observed peaks in visitor numbers are typically either before or after class and after lunchtime.

The Center also receives support calls from student and faculty members. Some of these are routed by the Service Desk while others are direct support calls. The phone number of the Center and the individual team members are displayed on the TLC website and are hence easily accessible to students and faculty. Team members, although not required to, hand out contact information during workshops and some of the members are well known by virtue of being technical leads on specific Academic technologies (like Mahara or Saba Meeting) so both these factors also contribute to call volume. Callers can also successfully request that their call be transferred from

one team member to the other. Support calls (depending on the topic) are handled by members of the Instructional Programs team and the Instructional Technology consultants on the Technical Team. These calls are routed back to the Service Desk if it is determined that the support issue is a basic Tier 1 category issue. However, it has been noted that some callers will say that they have already interfaced with the Service Desk to preemptively avoid being transferred back to the Service Desk.

The final aspect of the support function is in the handling of support tickets from the Service Desk. The Service Desk receives support calls from faculty and students. Student and faculty calls are handled separately by a Student Service Desk (manned by student workers/Teaching assistants/Graduate assistants) and a Faculty Service Desk (manned by full-time employees). The IT Technical Support Analysts, who answer the phones, enter the issue details as well as any troubleshooting steps and resolutions into an online ticket. If the analyst is unable to resolve the issue the ticket is routed to the TLC for handling by the Technical team. Both student and faculty service desk tickets are routed to the TLC. These tickets are called Tier 2 escalations. The Instructional Technology consultants in the technical team review the tickets and transfer any pedagogy related tickets to the Instructional Programs Team. This escalation is referred to as a Tier 3 escalation. Currently, the technical team only has a single Instructional Technology consultant handling all the Tier 2 tickets from the Service Desk. The Tier 3 escalation tickets are routed to a specific member in the Instructional Programs team. This member then disseminates the Tier 3 tickets on the basis of member specialization (for instance lead for Saba meeting automatically gets all the Saba tickets) and/or on the basis of member availability. Tier 3 tickets are currently handled by all 5 members of the Instructional Programs team.

In addition, to support calls, the Instructional Programs team members also conduct workshops throughout the year, for faculty members, the details of which are displayed on the TLC website and in broadcast emails to faculty members. These workshops can deal with technology functionality issues like how to manage quizzes or pedagogy centric, instructional design issues like how to enhance engagement through structured discovery.

CASE DESCRIPTION

Gap Analysis

The TLC needs to figure out a way to appropriately allocate resources so that both teams can work on fulfilling the strategic goals of the TLC while still being able to adequately and efficiently address the technical and pedagogical support needs of the faculty and students. As it stands today, both teams are bogged down by support

Table 2. Optimal state, actual state, and the gap

Optimal State	Identified Gap	Actual State
<ul style="list-style-type: none"> • A clear and concise definition of Tier 2 and Tier 3 tickets based on content and not on the capacity to resolve tickets. • A clear and concise process that indicates the priorities to consider when escalating tickets from Tier 2 to Tier 3. 	<ul style="list-style-type: none"> • Both teams handle lower level tickets leading to increase in ticket volume and time spent. • The technical team estimates 5-10% of tickets are Tier 1. • Tier 2 and Tier 3 loosely defined and based on member perceptions. 	<ul style="list-style-type: none"> • Any ticket escalated from Service Desk to TLC is considered Tier 2. • Pedagogy related tickets and time-consuming tickets or unresolvable tickets are considered Tier 3. • Equal weight given to team capacity and content.
No direct consultations (drop-ins/direct support contact) for IP team members.	Less time spent on strategic projects due to constant interruptions in the workflow from ad hoc support requests. Faculty bypass Service Desk entirely.	IP members receive 3 to 4 drop-ins per day plus direct support requests. In 2015, 71.59% of 630 total IP tickets were direct contact. In 2014, 76.69% of 489 total IP tickets were direct contact. (See appendix for additional data.)
University faculty (full-time and adjunct) are trained and can access online self-paced help resources when encountering low-level pedagogy/technical issues.	Faculty are not self-sufficient and contact TLC directly with simple yet time-consuming support issues.	Team estimates training workshops and webinars attendance are “moderate to low”. (Numeric data was unavailable). Training is not required for current or new faculty.
Both teams only resolve tickets related to their field of expertise, i.e. pedagogy and higher level academic technology support.	Time consumption adding to full workload and leading to less time available for true pedagogy/software research-related projects and activities.	IP team members resolve simple Moodle issues to complex pedagogy issues. One Technical Team employee handles yearly call volumes up to 1900 plus Tier 2 tickets. 5-10% of Tier 2 escalations are low level.
Instructional technology consultants conduct technical training and software research like testing alternative LMSs.	The consultant is overwhelmed, burned out and has no time for software research which is a TLC goal.	One Technical Team employee handles yearly call volumes up to 1900 plus Tier 2 tickets so no time for research.

requests and are struggling to find time to adequately address the strategic goals of the center. The TLC also needs to clearly define support processes and support ticket categories so as to bring in efficiency and clarity of workflow to individual employees and to the Service Desk, which is the source of the Center's Tier 2 escalation support tickets.

A gap analysis was conducted identifying the optimal state, the actual state and the gap between them (Table 2).

CURRENT CHALLENGES FACING THE ORGANIZATION

Cause Analysis

Cause analysis was conducted by reviewing the data from the interviews, TLC data and using Gilbert's PROBE model (Dean, 1998; Van Tiem, Moseley, & Dessinger, J. C., 2012) to identify factors causing the gaps.

1. **Gap:** IP team and Technical team handle tickets that do not align with their functionality as high-level support or level of expertise leading to increase in ticket volume and time spent. Tier 2 and Tier 3 loosely defined and based on perceptions of individual team members.

Cause: There are no official policies or procedures in place that define what constitutes a Tier 2 and Tier 3 ticket and what priorities and factors should be considered when escalating a ticket from Tier 2 to Tier 3. The procedures currently in place are loose and based on historical happenstance as opposed to a sound analysis of ticket data, volume, and available resources. Additionally, there is no official procedure on what should be done if a team member finds himself or herself in the performance gap situation mentioned above. For instance, team members from both teams have mentioned receiving tickets with issues that could have been easily resolved at a lower level. On average even simple tickets take about 30 minutes to resolve so even a small percentage of misrouted tickets can lead to increased volume and time spent.

There is also no official process for inter-team/interdepartmental feedback. During our interviews, we noticed that team members rationalized "non-aligned" tickets based on their perceptions of department functionality. For instance, several team members commented on the appearance of Tier 1 tickets in their escalation as well as incorrect/incomplete information in ticket details. However, they rationalized this as an indication that the Service Desk was too inundated with calls to be able to resolve this issue. So again they simply resolve the ticket. However, our interviews with the IT Technical Support Analyst indicated that they welcome feedback as an opportunity to correct any process flaws being exhibited by their full time or student staff.

The Technical Team is overloaded with ticket volume and having one staff member handling that volume in addition to other responsibilities. The team hence lacks the needed support to perform their job responsibilities adequately and effectively and that lack of resource is being reflected in the way the tickets are being escalated.

2. **Gap:** Less time spent on strategic projects due to constant interruptions in the workflow from ad hoc support requests.

Environmental supports and the individual capacity are the causes for the time consumed taking care of drop-in/direct support calls and support tickets. The TLC building is housed in a building which is conveniently located on the campus. The very relaxed atmosphere and the personal friendships of the staff members make it very accessible for faculty members to drop-in between classes to get support help from the Instructional Design Team. According to one staff member, the faculty drop-in and because of the relaxed atmosphere and knowledge that they will be helped causes the faculty to bypass Tier 1 and Tier 2 and go directly to Tier 3 thus taking the Instructional Design Team away from pertinent strategic projects.

Tier II supports two employees. At the time of the analysis, Tier 2 only had one employee responsible for the high volume of support calls. The high volume of calls which according to data was around 2,100 calls last year and 1,900 currently this year identifies that the individual capacity concerning the handling of calls is over and beyond the capacity of one employee, thus limiting the individual's capacity to perform at an optimal level. Therefore, the support calls and tickets are escalated to Tier 3 for support.

3. **Gap:** Faculty are not self-sufficient and tend to contact TLC directly with simple yet time-consuming support issues.

The gap that exists with simple yet time-consuming support issues is revolved around the lack of consequences for not attending workshops or webinars, the incentive and rewards for workshop attendance, and the skills and knowledge that each individual faculty member holds.

The necessary technical skills and knowledge of the faculty members vary according to the faculty member, and even though workshops and webinars are provided to faculty, there are no consequences in place for not attending the workshops or webinars so it is based on the want to of the faculty. There are no required policies in place for the expected attendance of workshops and webinars. There are also currently no incentives or rewards given if a faculty attends the workshops or webinars. Therefore, attendance is moderate to low most times.

4. **Gap:** Time consumption leading to less time available for true pedagogy related projects and activities. Time consumption adds to an already full workload. During our interviews with TLC staff, we learned of the defined work scope of each position as well as the priorities of each position. On average, members of the Instructional Programs team placed resolving tickets near the middle or towards the end of their top priorities. However, it was expressed on average up to 30% of their workday was dedicated to resolving ticket and direct contact faculty inquiries. The Technical team's top priority is to resolve Tier 2 tickets. However, the excessive amount of tickets received by the technical team every day makes it impossible for team members to resolve every inquiry. Both the IP and Technical team members expressed that several ticket inquiries they receive daily should have been resolved at the previous level.
As a result, much of TLC staff time is spent on inquiries that are not their responsibility to resolve. This extra consumed time takes away from other higher priority tasks for the Instructional Program team and causes an overflow of tasks for the Technical team. The causes of this issue are the result of 1) a lack of clear definitions for what constitutes a Tier 1, Tier 2, and Tier 3 ticket; 2) the lack of a clear workflow process for moving ticket inquiries through each level of consultation; and 3) an overload of work at the Technical team (Tier 2) level. This overload of work can also be attributed to short staffing within the Technical team. The small team size does not have the resources to resolve the sheer amount of Tier 2 inquiries, so some inquiries that maybe could be resolved by Tier 2 are sent to the IP team (Tier 3) for purposes of time management. There are no established incentives, rewards, or consequences for members at Tier 1, 2, or 3 levels to resolve ticket inquiries and avoid passing them on to the next level.

SOLUTIONS AND RECOMMENDATIONS

Through an extant data analysis and interview process, our team identified several key issues contributing to the TLC's originally identified problem of the day to day functions not leaving enough time for strategic duties. We then identified eight interventions to help TLC organization manage resources effectively thus leaving time for both daily functions and strategic duties. Table 3 was presented to stakeholders to outline the identified issues and corresponding proposed interventions.

Table 3. Performance issues and intervention proposal

Performance Issues	Proposed Interventions
Lack of uniform definitions for Tier 2 and Tier 3 tickets as evidenced by Excel data analysis. (For e.g. course design issues categorized as DE Design in one ticket but as pedagogy in another)	<p>Clear definitions of what constitutes a Tier 2 and Tier 3 ticket:</p> <ul style="list-style-type: none"> • Collaborate with Service Desk to define what constitutes a Tier 1/Tier 2 ticket and with Instructional Programs/Technical teams to define Tier 2/Tier 3. • These definitions are created with collaborative input from representatives of each Tier. • Clear communication and posted resources for each Tier to reference.
Tickets incorrectly escalated leading to increase in ticket volume and time spent. Lack of communication to address issues of escalations and missing information (like browser data) in tickets.	<p>A clear process for escalating tickets based on the established definitions:</p> <ul style="list-style-type: none"> • Defined process dictating responsibility of each Tier, course of action with standard escalations and special situations like an incorrectly escalated ticket or a ticket with incomplete information. • The process is created with collaborative input from all Tiers. • Clear communication and posted resources for each Tier to reference.
Less time for strategic projects due to interruptions in the workflow from ad hoc support requests. Direct calls with low-level issues bypass. Excel data indicates that more than 60% of member tickets are direct contact support issues.	<p>Establish a firm policy on drop-ins (either no drop-ins at all or restrict drop-ins to a few hours per day/few days per week) and direct calls (caller provides Service Desk ticket number to ensure Service Desk has reviewed.):</p> <ul style="list-style-type: none"> • Drop-ins/support calls policy uniformly adopted by all members and communicated to faculty. • Communicate new policy via a sign at Center entrance, an email with Service Desk contact and assistance from the Administrative Assistant.
Incorrectly escalated and incomplete tickets, especially from Service Desk. Lack of communication to address these issues. (Service Desk is open to feedback and can handle current capacity.)	<p>Regular meetings with a representative from the Service Desk (Tier 1), Tier 2, and Tier 3:</p> <ul style="list-style-type: none"> • Bi-weekly, monthly, or bi-monthly meetings based on availability. • Open communication to address issues, consistency or inconsistency with ticket definitions and escalation process.
Tickets received from departments who have their own IT Service Desk and can handle these tickets and ease Tier 2 ticket volume.	<p>Collaboration with other departments at the university to recruit for assistance in resolving Service Desk issues pertaining to specific departments:</p> <ul style="list-style-type: none"> • Establish a process to define the responsibilities of each department. • Service Desk calls to be routed to the appropriate department. • Representatives from each department to attend regular meetings with Tier 1, Tier 2, and Tier 3 as stated in intervention 4.
Faculty members not prepared to resolve issues, with regards to many low-lying support issues. FAQ website is not well known and not user-friendly. (Example: search on "Gradebook" and "Grade Book" yields different results). Excel Sheet used to collect ticket information contains several errors, blank fields, and issues are not categorized uniformly.	<p>Develop asynchronous training and how-to resources for instructors based on Help Desk, Tier 2, and Tier 3 data:</p> <ul style="list-style-type: none"> • Redesign an Excel sheet with drop-down boxes and other controls to ensure uniform data collection so it can be used for accurate data analytics. • Use analytics from Excel sheet data to isolate problem support areas and create appropriate just-in-Time resources such as tutorials. • Publicize the FAQ website via email, Moodle sign-in, and any additional mode of available communication to inform instructors. Include FAQ website links in all training resources and workshops. • Run a usability test for the FAQ website to ensure that the site is user-friendly and easy to use. (Possibly recruit student team from Web Design and Usability class in the Technical/Professional Writing degree program to conduct this study).
Tier 2 tickets being escalated on the basis of capacity rather than content. One Technical Team employee has to handle call volumes up to 1900 in addition to resolving Tier 2 tickets. Leads to burnout and leaves no time for strategic duties like software research.	<p>Provide Tier 2 adequate resources to resolve tickets as well as to conduct technical training and technical research such as testing alternative software, LMS, etc.:</p> <ul style="list-style-type: none"> • Hire an additional staff member to assist the Tier 2 team. • Option for a part-time or full-time hire. • Possibility of a student hire based on availability and qualifications.
Attendance for training workshops / webinars low with instructors opting to call in for support. Difficult to schedule training for adjunct faculty due to their work schedules.	<p>Required Professional Development for University instructors:</p> <ul style="list-style-type: none"> • Coordinate with HR to establish mandatory face-to-face or asynchronous training sessions (created by Tier 2 and Tier 3 team members) for new instructors or when a new technology/system is implemented.

Table 4. Feasibility analysis

	Proposed Intervention	Benefit Rating 1-5	Cost Rating 1-5
1	Clear definitions of what constitutes a Tier 2 and Tier 3 ticket.	4.5	3.5
2	A clear process for escalating tickets based on the established definitions.	4.5	3.5
3	Establish a firm policy on drop-ins: either no drop-ins at all or restrict drop-ins to a few hours per day/few days per week. Establish a process for handling direct calls: caller provides Service Desk ticket number to ensure Service Desk has had a chance to work on the issue.	4.5	2.5
4	Regular meetings with a representative from the Service Desk (Tier 1), Tier 2, and Tier 3.	4.5	2
5	Collaboration with other departments at the university to recruit for assistance in resolving Help Desk issues pertaining to specific departments.	4.5	3.5
6	Develop asynchronous training and how-to resources for instructors based on Help Desk, Tier 2, and Tier 3 data.	3.5	5
7	Provide Tier 2 adequate resources to resolve tickets as well as to conduct technical training and technical research such as testing alternative software, LMS, etc.	4.5	4.5
8	Required Professional Development for university instructors.	5	5+

Using the stakeholders' feedback, we were able to identify the interventions with the highest feasibility ratings and make our final recommendations. Table 4 outlines our feasibility analysis.

Based on our client feedback and feasibility analysis, all of our interventions were presented as effective solutions. However, we worked together with the client to identify the interventions that could be implemented.

Interventions 1 - 5 were identified by our clients as being reasonable and possible to adapt. It is recommended that meetings be conducted with Tier 1, Tier 2, Tier 3 representatives in order to examine implementation impact on workload, suggest revisions if needed and devise a strategy to facilitate member acceptance. Similarly, it is also recommended they meet with a faculty representative to gauge the impact of changing drop-in/direct support policies and devise a strategy to facilitate acceptance of these changes. All of these interventions will lead to improvements for the TLC if properly and consistently implemented. The identification of tiers for the tickets and establishing policies for drop-ins and processes for handling direct calls fall under the non-instructional category of job analysis and work design where clear guidelines have to be identified as to what constitutes each tier and who handles the issues regarding each tier tickets (Morgeson, Brannick, & Levine, 2019; Van Tiem, Mosely & Dessinger, 2012).

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KEY TERMS AND DEFINITIONS

Cause Analysis: It is the process of identifying the causes of the gaps that exist in the organization.

Environmental Analysis: It is the process of examining the work, worker, and workplace in an organization.

Feasibility Analysis: it is a process of identifying the likelihood of success in the implementation of the interventions identified.

Gap Analysis: It is the process of identifying the gap by measuring the actual performance and optimal performance.

Organizational Analysis: It is the process of examining the organization including their mission, vision, goals, structure and key stakeholders.

Performance Analysis: It is the process identifying the need or gaps in an organization using a systematic approach including organizational analysis, environmental analysis, gap analysis and cause analysis.

Resource Allocation: A process of assigning and managing resources based on an organization's strategic goals.

Teaching and Learning Center: A center that provides support for teaching and learning at higher education institutions.

APPENDIX: QUESTIONS FOR DISCUSSION

1. Describe the teaching and learning center's mission, vision, values, and goals from this case?
2. Describe how the work, worker, workplace environment operate in this case?
3. What are the gaps in the organization's performance?
4. What is causing the gaps?
5. What are some interventions recommended to address the causes of the gaps?

Chapter 4

The Balancing Act: Interpersonal Aspects of Instructional Designers as Change Agents in Higher Education

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EXECUTIVE SUMMARY

Upon hearing a multitude of complaints from faculty members about the required training module prior to teaching online courses at Great Plains University for the first time, the instructional designers at GPU's North Central Campus decided to work with a faculty fellow to create a local version of the training. Before discussing specific modifications to the training module, the group delved into the interpersonal aspects of the relationship between instructional designers and faculty members in higher education. They suspected that these relationship dynamics had something to do with the shortcomings of the existing training module, and they wanted to ensure that they addressed them in the new version of the training. The result was a set of recommendations sent to the Provost at NCC that aligned the modifications to the training intervention to the performance problems in the institution, while simultaneously accounting for the interpersonal aspects identified in their discussions.

DOI: 10.4018/978-1-7998-0054-5.ch004

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ORGANIZATION BACKGROUND

Great Plains University (GPU) is a public land-grant university in the Midwestern region of the United States with approximately 75,000 undergraduate and graduate students across its six campus locations. Within each of these campuses, instructional designers work with faculty members to deliver instruction to students in face-to-face, hybrid, and fully online learning environments. Individuals in each group are members of separate professional unions that operate under collective bargaining agreements regarding working conditions, and this organizational paradigm often influences relationships between these groups. This arrangement and its corresponding delineations of duties for each group serve to accentuate the questions regarding the nature of interactions between instructional designers and faculty members within higher education as a whole. In addition, the majority of instructional designers at GPU have an educational background at the master's level, while most faculty members have terminal degrees in their respective fields.

At the North Central Campus (NCC), the second largest with GPU, there are about 250 full-time faculty members and two full-time instructional designers. The designers are classified as Instructional Design Specialists within their bargaining unit and spend the majority of their time working with faculty members to design instruction for delivery to students. Both instructional designers have educational backgrounds that include a master's degree in an area closely related to instructional design and technology. Each has experience as an instructional designer in a sector other than higher education prior to their current position, one within public secondary education and one within the industry.

In addition, these two instructional designers are both relatively new to their positions and are able to compare their interactions with faculty members to those with subject matter experts outside higher education that are still in their recent memory. The expectations and perceptions of these two individuals are somewhat unique to the experiences of other instructional designers within the GPU system of higher education who have a range of different backgrounds and amount of experience working in this role in higher education.

The two instructional designers at NCC are both male and Caucasian. Randy Kerrigan is a male in his early 30s who has been with the university for a little over two years. His colleague, Steve Gilmour, is a male in his late 20s who has been with the university for just shy of one year. While they both possess master's degrees in a field closely related to instructional design and technology, their undergraduate degrees are in disciplines within the humanities. In addition to working with faculty members in the arts and sciences, Randy and Steve also interact with faculty in business, education, and human services.

SETTING THE STAGE

The interactions between instructional designers and subject matter experts, such as faculty members within the context of higher education, and the perceptions of these working relationships have been noted in the literature as important to the development of the field. As instructional design centers were initially created at colleges and universities, Reiser (1978) proposed an approach to increase interactions between instructional designers and faculty members throughout the process of planning and implementing instructional materials. More recently, Campbell, Schwier, and Kenny (2009) argued that instructional designers can and should use their interactions with faculty to serve as change agents within higher education. Given the dynamics of working with highly credentialed individuals and rapid changes in technology, the nature of interactions with faculty members and the corresponding value of the instructional design function within higher education is more significant now than ever before.

Reiser (2001) explains that institutions of higher education began establishing instructional design centers in the early 1970s to assist faculty members with improving their instruction through the use of media. However, declining budgets and a perceived lack of impact on instruction during the 1980s caused many institutions to question the importance of the instructional design function. The increasing demand for distance education delivered via the Internet in the 1990s caused a renewed interest in instructional designers within higher education to create high-quality courses and programs, but the maturity of online instruction over the past ten years has reopened the discussion regarding the role of instructional designers working with faculty members at these institutions.

Early research on interactions between instructional designers and faculty members included a study by Liebler (1978), who conducted a survey of 130 higher education institutions in order to get a sense of the relative emphasis upon the design of instructional materials and the production of those materials by instructional designers working with faculty members. The results of this research were exclusively quantitative in nature and pointed to both the limited impact of instructional design and the overall lack of faculty involvement in these activities. Liebler called for additional research that examined institutional climates that were favorable for relationships between these two separate groups.

Research in the mid-1980s continued to emphasize the importance of examining the skills and behaviors of instructional designers, with the focus shifting to the differences between instructional designers in higher education and the business and industry sector. A study conducted by Willis (1983) sought to examine the relative amount of time spent on task versus relationship behaviors by instructional designers

The Balancing Act

in university and industry settings. The author found that instructional designers in higher education spent significantly more time on relationship behaviors than their counterparts in industry, but the specific nature of these activities was not examined due to the nature of the study. This research pointed to the importance of delving deeper into the social aspects of instructional design that contribute to the value of this function, especially within the higher education sector.

Sullivan (1984) conducted a similar survey of 750 instructional designers in higher education and business/industry to determine behaviors exhibited during the instructional design process. This research is another example of a study that identified the importance of addressing relationships with clients (such as university faculty members in higher education) in order to optimize instructional design practice but failed to provide specific information about the perceptions of instructional designers regarding current conditions or conditions that would facilitate better practice.

Toward the late-1980s, research shifted toward practices specifically within the sector of higher education that would facilitate interactions between instructional designers and faculty members. Several of these articles were based on reviews of the literature to that point and were largely prescriptive in nature, rather than describing the experiences of instructional designers within the field. Tessmer (1988) illustrated the unique nature of instructional design within higher education, where instructional designers need to interact with faculty members who are both the client for projects and the individual who uses the instructional materials produced. The author interestingly suggested that instructional design students in graduate programs observe interactions between instructional designers and faculty members to identify optimal strategies, although he did not actually employ these techniques during his own research.

Reiser (1988) built upon previous research by predicting that instructional designers in the twenty-first century would be called upon to integrate emerging computer technologies into instruction, but he noted that interpersonal skills in working with faculty members would continue to be the most important in the future. This research was a continuation of a series of studies that identified the importance of interactions between instructional designers and faculty members without examining the perceptions of instructional designers themselves to identify individual or collective experiences that would illuminate our understanding of this relationship.

As the role of instructional designers shifted to delivery of distance instruction via the Internet and qualitative research became more accepted, authors such as Savenye and Robinson (1996) began to note the increase in the use of qualitative techniques to address instructional design and technology issues and the potential to examine questions more deeply from this perspective. An example of this type

of research is a case study conducted by Larson and Lockee (2009) that examined the preparation of instructional designers for various sectors such as industry and higher education and stressed the importance of providing experiences to students within the context of those particular environments.

Collectively, the bulk of the research on the role of instructional designers in higher education has been largely quantitative in nature and encompassed the entire skillsets possessed by instructional designers rather than specifically focusing on interaction with faculty members. The previous work in this area does serve to underscore the importance of instructional designer interactions with faculty members in higher education, as well as the potential for additional insights into the meaning of lived experiences of instructional designers through case studies that pose questions that go deeper than other research that has been done in this area.

The following case poses three primary questions that are informed by previous research on this topic:

1. What are the perceptions of instructional designers regarding their interactions with faculty members within institutions of higher education, such as Great Plains University?
2. Are their perceptions different from those related to previous interactions with other types of subject matter experts in different sectors?
3. How do these perceptions held by instructional designers affect their self-efficacy and feelings of effectiveness in their roles as change agents within their institution?

CASE DESCRIPTION

The six campuses within GPU collaboratively offer a required Online Instruction Training Module (OITM) to faculty members who plan to teach an online course for their campus but have not done so in the past. Instructional designers at each of the participating institutions serve as facilitators for this course, which is offered three times each year, by guiding faculty members through five week-long modules that culminate in the development of an online course to be used in a subsequent semester. This certification course involves a great deal of interaction between instructional designers and faculty members via online discussion boards and emails, and that interaction provides a wealth of information about the manner in which the various individuals perceive their respective roles at their institutions.

The Balancing Act

Upon hearing a significant amount of negative feedback from faculty members at North Central Campus (NCC) about the current version of OITM that is offered by the collaborative group of GPU campuses, the Instructional Design group was commissioned by their Provost to develop a local version of the course that would better meet the needs of faculty. A faculty fellow position was created to allow a faculty member release time to work with Randy and Steve to create this new course. This effort began at the start of the fall semester, and the goal was to develop the course over the summer and offer it to faculty the following fall. The two instructional designers planned a meeting to touch base with the faculty member, Dr. Carrie Robertson, on a Friday afternoon. Dr. Robertson is known to be very supportive of the instructional design function at the campus, but she also has been with the university long enough to be able to speak to the wide variety of faculty activity throughout the institution.

The meeting started at 9:00 a.m. in the lower level of the library on campus was the instructional design area is located. The conference room on that floor has seven modular tables pushed together to form a conference table, and there are twelve chairs surrounding the tables. There are a whiteboard and digital projector on the interior wall and a row of six computers with chairs at each terminal along the opposite wall. A smart cart that is used to control the projector is in one corner of the room. Dr. Robertson arrived at 9:05 in a black business suit that she was wearing from a meeting prior to this one. The instructional designers arrived a couple of minutes later. Randy stationed himself behind the smart cart to control the digital projector during the meeting, while Steve sat at the head of the conference table next to Dr. Robertson.

Dr. Robertson began the meeting by asking, “Where do we start? Most of the faculty seem to feel like this training module is a waste of their time and an insult to their intelligence.” Both instructional designers sighed and shook their heads in agreement. Steve agreed but noted that the training was unnecessarily tedious, but there was a true need for the content to be presented. “So for example, the technical aspect of it. They do not know how to do that, so that is how I view it. They may have their degrees and they may have their content expertise, but they may not know how to do this. So that’s why they’re coming here.” He felt that he had skills and knowledge in the area of technology integration within instruction, which set him apart from faculty members who possess domain knowledge but less understanding of online instruction. Randy noted, “As an instructional designer, I have a little more knowledge in how to take information and be able to relay it to the learner.” Dr. Robertson conceded that the instructional designers did have knowledge in the area of pedagogy, which a number of the faculty members did not have when it came to the delivery of online instruction.

Both instructional designers were aware that they needed to acknowledge or give way to a faculty member's skill in areas where they did not have as much expertise. The current training module did not give the faculty much credit for being experts in their respective fields. Randy started, "I think knowing a little about a lot is helpful. I can usually converse a little bit about the different subject matter. I find some related fact to throw out and get them started talking. But listening to them is a big deal." He knew that faculty members have skill and knowledge in their specific disciplines, and he needed to appeal to that expertise in order to facilitate his interactions with them. Dr. Robertson added, "We as faculty want you to acknowledge our subject matter expertise, as well as the demands on our time." Steve was aware of the limited amount of time faculty members had to complete the training module and wanted to reduce the demand on their time to acknowledge their existing skills and knowledge. "This training module can be as rigorous as the faculty want it to be, based on their individual needs."

Dr. Robertson asked, "So how do we deal with this? What are we trying to accomplish here?" Randy was very committed to the quality of North Central as a whole and felt a need to adhere to both personal and professional standards of excellence. "This is a tricky balance," he said, "We are accountable if we don't do this, to our own sense of duty." He passed his copy of the Quality Matters Course Design Rubric Standards to Dr. Robertson and noted that those standards should be kept in mind as materials were created for the training module. Steve agreed wholeheartedly, "Quality education is what we're here for, so I think it is important that we focus on that and do it to the best of our ability." All three agreed that adhering to the accepted standards of the instructional design profession was of utmost importance, and using the Quality Matters rubric would be a good way to ensure this.

The instructional designers were also aware that it was important to build rapport and affinity with faculty members, and establishing relationships with faculty at a personal level helped them facilitate their interactions with them. Steve noted, "I have friendly conversations with them when they have questions. To me, it has always been about customer service techniques of providing them with resources above and beyond what they may ask for. So you just seem helpful, and they know you're here for them." He truly wanted to share experiences with faculty members and improve his relationships with them through these training modules. "I like to inject some humor," said Randy, "I'll tell them maybe they should restate things in English so that their students know what they're trying to say." Dr. Robertson chuckled. "I've always had very positive interactions with you guys. Humor helps sometimes when you're frustrated with something else," she said.

The Balancing Act

At this point, Dr. Robertson was attempting to determine how they could find a solution to providing a high-quality training module without requiring the faculty to jump through too many hoops. She wondered aloud, “How did the current solution get so out of control? Why did all the instructional designers agree to a module that makes the experience so difficult?” Randy bristled a bit at those questions, “I feel that whenever I’m in a course, I can see ways that it could easily be made more effective. But I know that the suggestions will just ricochet off and not really sink in. No one will use them.” He had experienced a number of instances where faculty members were not interested in the information he perceived to be important from an instructional design perspective. Steve agreed, “Some of them don’t seem to have too much respect. Not for me as a person, but as an instructional designer. My role seems to be underestimated. They don’t see me as an equal.” He was frustrated and a little upset that some faculty members did not value his position, and he understood why his colleagues had taken the opportunity to make the training module so rigorous.

After calming down a bit, Steve conceded that he wanted to take the opportunity to minimize the differences in the professional aspects of their relationships while interacting with faculty. He said, “Whether they see me as a colleague or not, that’s their personal viewpoint. I see them as a colleague. They have their area of expertise, and I have mine. I always look at it as if they do not know how to do what they are trying to do when it comes to online instruction. So that’s why I’m here, to help them get through that.” Randy agreed, “We can be much more casual about this version of the training module. The difference from the previous course is our approach and our tone. We can make it clear that we’re not going to be as demanding as our counterparts at the other campuses.” Dr. Robertson nodded her head and said, “I think this approach is going to be well-received by the faculty. So where do we go from here?”

The three participants in the meeting agreed that there were several aspects of the relationship between faculty members and the instructional designers that needed to be considered before designing the new training module for online instruction. If they were going to produce a better version of this module, each of these interpersonal dynamics had to be addressed.

CURRENT CHALLENGES FACING THE ORGANIZATION

The patterns of behavior within the relationships between the instructional designers and faculty members pointed to three primary “balancing acts” that the instructional designers felt they needed to perform in order to maintain relationships and effectively perform their duties according to their own personal and professional standards.

Instructional Design Expertise vs. Faculty Expertise

It was clear that the instructional designers possessed a great deal of expertise regarding online pedagogy and the design of instruction for online delivery. They felt a need to establish this expertise while providing training materials to faculty members in order to show that they could be a resource moving forward when faculty had questions as they taught online. On the other hand, the instructional designers knew that they should defer to faculty expertise within their specific domains based on their qualifications and status as course instructors. Randy mentioned, “Faculty members are just going to see us a certain way until someone that has their credentials champions the idea to give some sort of credence or endorsement of instructional design and its benefits.” Steve agreed, “It could start with other faculty. You get one faculty member, and they start endorsing or telling their colleagues about this resource.”

The group agreed that the new training module had to strike an appropriate balance of providing instructional design knowledge and skills to faculty members while acknowledging that the faculty were experts in their own domains and needed the flexibility to deliver that knowledge as they saw fit. This would require a set of instructional design guidelines with clearly defined benefits to the learners, as well as optional recommendations that could be adapted to subject matter at the discretion of faculty.

Professional Duty vs. Building Rapport

There was no doubt among faculty who had worked closely with Randy and Steve that they both had a strong sense of professional duty when it came to helping provide quality instruction to students. Most faculty were not familiar with the instructional design knowledge base, so it was important for the instructional designers to find a way to share best practices in a manner that was both effective and efficient. This sense of duty had to be balanced with a recognized need to build personal rapport

The Balancing Act

and affinity in their interactions with faculty members. As professionals in their own fields, faculty members were not interested in having information shoved at them in an overly prescriptive manner through a training module. Steve suggested that the training module provide information in a manner similar to a casual conversation in his office. He said, “We will just chat about a course for a few minutes, and it often turns into suggesting a few ideas. They appreciate that.” Randy concurred, “I just answer their questions as efficiently as I can. I think it’s important to be able to do that quickly and easily for them.”

Steve, Randy, and Dr. Robertson all agreed that the Quality Matters Rubric would be a good starting point for each of the sections of the training module. It contained all of the fundamental elements of professional instructional design competencies, and it was easily understandable by individuals who were not necessarily familiar with the entire knowledge base of the domain. They could provide examples of each of the Quality Matters standards within the context of specific subject domains in order to show their effectiveness. This would allow them to maintain quality standards without appearing to talk down to their audience.

Relationship Imbalance vs. Appearing Collegial

Both Randy and Steve shared their frustration with the imbalance in relationships between instructional designers and faculty members. They were sometimes upset by this perception and the negative consequences the imbalance had on their effectiveness in their professional positions. These feelings had to be balanced with a genuine desire to appear collegial in order to minimize any perceived differences in the professional aspects of their relationships with faculty. Steve mentioned a need to avoid certain topics to appear collegial with faculty, “Just because you’re walking that fine line, and you don’t want to wake the beast so to speak.” Randy chuckled but agreed, “It helps to regard them as colleagues. If you go into it with the right attitude, it will often result in mutual respect.”

The group concluded that the new training module had to be respectful of the faculty members’ position within the university structure and acknowledge the unique limitations on their time. The expectations for completion needed to take into consideration the knowledge and skills the faculty already possessed, as well as any previous training they had already taken. For the instructional designers to establish an ongoing relationship as colleagues, the training module had to provide the faculty with helpful resources that could be communicated in an effective and appropriate manner.

The Balancing Act

While they experienced these tensions somewhat differently, each of the instructional designers felt certain institutional factors influenced his ability to establish his instructional design expertise with faculty. Randy indicated that he felt certain university factors influenced his opportunities to assert his instructional design expertise. However, Steve placed more emphasis on his feeling that the different bargaining units led to a structural imbalance within the university that required more endorsement of the instructional design function to improve his relationships with faculty. In both cases, the instructional designers felt they had to address this balancing act in order to create a training module that would ensure the delivery of quality online educational experiences to students.

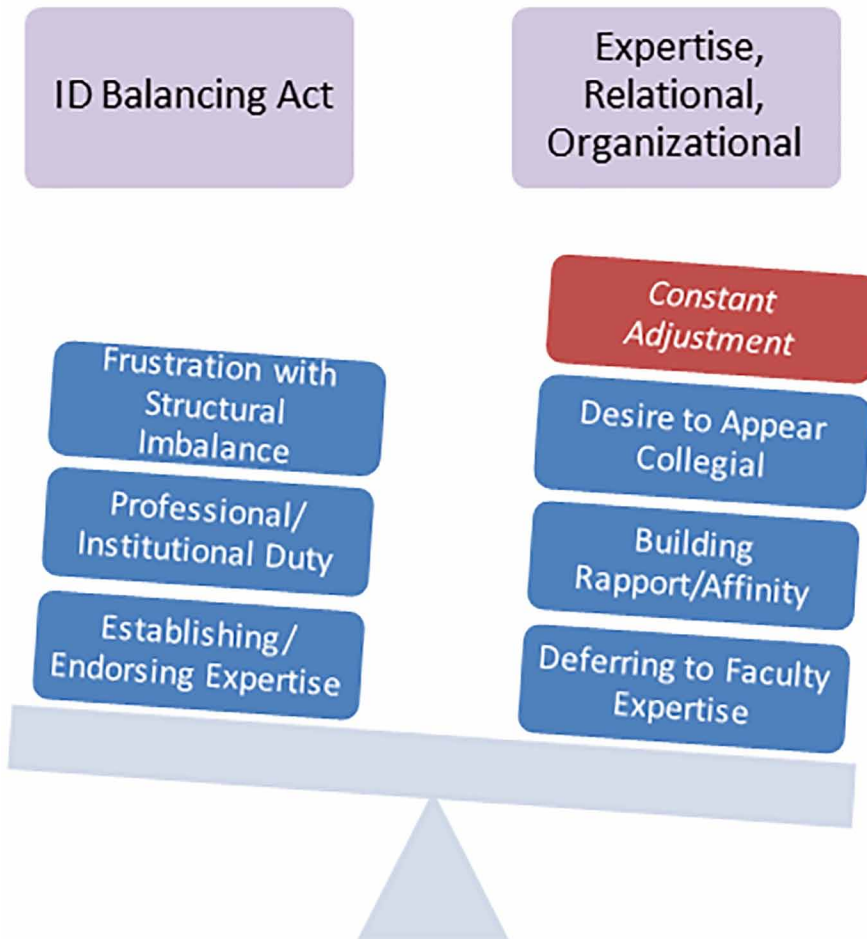
The following case display (Figure 1) represents the experience of the instructional designers as they interacted with faculty:

The nature of the interactions between the instructional designers and faculty members was extremely complex, consisting of several competing motivations that the instructional designers must balance in order to perform their duties and maintain working relationships. The concept of task behaviors and relationship behaviors as separate and discrete entities in the work of instructional designers does not sufficiently represent the reality of their experiences. The three balancing acts experienced by Randy and Steve show that tasks cannot be completed without maintaining and enhancing relationships, and working relationships cannot be sustained without the completion of tasks between instructional designers and faculty members. The instructional designers are continually working to establish and assert their expertise, while simultaneously deferring to faculty expertise. They strive to adhere to their sense of professional duty at the same time as building rapport with faculty members on a personal level. Finally, they deal with several of the common imbalances in their relationships with faculty, while at the same time continually attempting to appear collegial in those working relationships to reduce power differences.

The instructional designers did note that their respective experiences in other sectors had some effect on their perceptions of working with faculty in higher education. Randy had previous experience working with subject matter experts in the industry, which served to accentuate his frustration with the relative lack of opportunity to display his instructional design expertise. He was used to working with clients who were aware of the value of his expertise and paid him specifically

The Balancing Act

Figure 1. Instructional design balancing act



to exhibit that expertise in his projects. Steve's experience in K-12 education heightened his consciousness of some of the structural forces at work with regard to institutional endorsement of the instructional design role and the influence of the faculty union on policy decisions. He was a bit more resigned to those forces, although he did hold out hope that the university administration could bring about change in these areas.

The manner in which the instructional designers perceived their interactions with faculty also affected their sense of self-efficacy and effectiveness in their roles at the institution. Although their different backgrounds led to different feelings about the forces behind their experiences, the instructional designers agreed that it had a significant influence on their feelings of effectiveness as instructional designers and change agents. They both experienced frustration with their interactions at times that led to disappointment and temporary acceptance of less than desirable outcomes, but they also had very clear ideas about steps that could be taken to improve both their interactions with faculty and the value of their positions to the institution as a whole.

SOLUTIONS AND RECOMMENDATIONS

After their meetings to discuss the root causes of the problems within the existing training module, the group proposed a local version of the training to the Provost at North Central Campus that included several interventions to mitigate the identified performance problems (Table 1).

Collaboration

The existing online instruction training module (OITM) contained a discussion board activity that was intended to give faculty members an opportunity to collaborate with other faculty taking the training and allow them to experience online collaboration as students do in an online course. Points were assigned to each faculty member based on the number of original posts they created (3 points each) and the number of responses they made to posts by other faculty members (1 point each). For each of the five weeks of the training module, a faculty member needed to accumulate at least ten points within each discussion board in order to earn credit for the collaboration activity. Many faculty complained that this activity often turned into a series of obligatory posts for the sole purpose of collecting points, rather than a productive forum for the sharing of ideas.

The Balancing Act

Table 1. Summary of proposed changes to the training interventions for identified performance problems

Performance Problem	Modified Interventions
Faculty learning to deliver instruction online did not have the opportunity to collaborate with each other in a productive manner.	<ul style="list-style-type: none"> • Elimination of mandatory discussion board posts • Face-to-face meetings with instructional designers and other faculty taking the training module
Faculty were not familiar with the best practices for delivering instruction online or the associated knowledge base.	<ul style="list-style-type: none"> • Required readings replaced with relevant Quality Matters content • More academic readings provided as supplemental materials
Faculty were not able to dedicate time to the training module during the semester while keeping up with their teaching and research duties.	<ul style="list-style-type: none"> • Training module could be started at any time (during semester breaks, etc.) • Sections of the module could be completed in any order at any pace the faculty chooses
Satisfactory completion of the training module did not relate to the overall need for training and simply reflected completion of a set of activities.	<ul style="list-style-type: none"> • The point-based system for completion was eliminated • A partially completed course shell for an actual class was now required
Faculty were not given consideration for previous training and/or experience related to online instruction.	<ul style="list-style-type: none"> • Faculty were given the ability to “test out” of the training module • Sections of the module could be taken separately based on specific faculty need • Faculty were able to audit sections of the module at any time

The group recommended the elimination of mandatory discussion posts from the training module, and topic-based forums were created for faculty members to post and respond to frequently asked questions about specific instructional design strategies and functionality within the learning management system. Because there was an identified need for faculty members to collaborate with each other regarding the training material, a face-to-face kickoff meeting was added at the beginning of the module in order to allow faculty members to discuss their questions before interacting with the material. The faculty were also given the opportunity to meet with Randy and Steve toward the end of the training module in order to talk about specific strategies for online instruction as they began putting together the course shell for their first online course (Willis, 1983).

Best Practices

The primary performance problem that the training module was created to address was the fact that faculty who had primarily taught face-to-face in the classroom were not familiar with best practices for delivering instruction online. The training module offered collaboratively by the six GPU campuses attempted to provide this information to faculty through a series of readings about online pedagogy within the content of each of the five-week-long sections of the module. However, the majority of these readings were quite lengthy and theoretical in nature. Several faculty members taking the training said that while these articles were helpful, they did not have the time or interest needed to dedicate to parsing through the large volume of information. They were more interested in content that contained prescriptions for online instructional strategies and a brief explanation of the theory behind these strategies.

The group decided that the content contained within the Quality Matters Course Design Rubric Standards encompassed all of the strategies faculty members would need to get started with creating and delivering their first online course. They put together an outline for content sections within the module that would elaborate on each of the design standards and provide examples of how these standards could be implemented within specific subject domains. A handful of the original articles were preserved for optional reading activities that faculty could take advantage of as interest and time allowed. This combination of streamlined content centered on the Quality Matters rubric and key supplemental material would provide faculty with the information they needed for the initial training module, and it would also set the stage for ongoing discussions between the instructional designers and faculty members moving forward as additional online courses were created (Campbell et al., 2009).

Flexible Timing

Even though the training module was required for faculty teaching an online course for the first time, the large majority of faculty members agreed that they felt the training was a worthwhile investment of their time. However, the timing and delivery of the training module were not flexible with regard to the teaching and research duties faculty had to perform during the semester. The module was offered each academic semester, but it always took place in the middle of the semester during

The Balancing Act

weeks six through ten of a fifteen-week session. Faculty members were often ramping up to mid-term examinations for the courses they were already teaching during this portion of the semester. They would attempt to cram as much work as possible on the training into their fall and spring breaks. The other problem they encountered is that each of the five sections of the module was only available for one week. If a faculty member missed a particular week due to their teaching schedule or an academic conference, they were unable to make it up at a later time. This led to a great deal of frustration and complaints to the instructional design department.

The group saw no reason for only making the training module available for five specific weeks in the middle of each academic semester. Although the new training module would require about the same amount of work, the faculty member could start it at any time during the year and complete it at any pace they desired. If a faculty member wanted to start the training during the summer and complete it during the fall semester, there was no reason they should not be able to do so. The instructional designers would maintain a roster of faculty members who were currently enrolled in the course so that other faculty would be able to contact them and collaborate on various sections of the module if they desired. This would also allow the flexibility of working through the sections of the training module in any order and revisiting sections after they had been completed (Tessmer, 1988).

Helpful Assessment

Satisfactory completion of the training module was required to teach an online course at NCC, but faculty members were interested in hearing about ways in which they could improve their delivery of online instruction. Unfortunately, the current version of the training module only assessed the faculty based on their completion of a set of activities within each section. Much like the discussion boards, each activity was assigned a set of points that each faculty member could earn by completing each one according to a stated rubric. The original intention of these activities was to give the faculty members experience similar to that of students taking an online course, but faculty claimed that it turned into a game of earning a certain number of total points rather than improving their online pedagogy. Faculty members who fell short of the required point total were not given credit for completing the training module, which resulted in a number of complaints to the Provost and the instructional design department.

The group immediately decided to eliminate the points-based system of assessment for the training module, because it did not help address the initially identified performance problem. Faculty members were experts in their respective fields, and they did not need to be subjected to this type of granular assessment in order to improve their instructional design skills. In place of the points for completing various activities, a capstone activity was introduced where the faculty member would begin implementing the Quality Matters standards by creating an initial course shell for their first online class to be offered to students. Randy and Steve would consult with the faculty as they put the shell together, and they would meet at the end of the training module to provide feedback and confirm completion of this final assignment (Liebler, 1978). By connecting this assessment to a more realistic activity, the training module was realigned to the original performance problem and the identified need for faculty training.

Consideration for Existing Knowledge

While it was assumed that faculty who had not taught online for GPU did not have any experience teaching online, an increasing number of new faculty members to the North Central Campus had different degrees of experience with online courses at other institutions. However, the current training module did not make any allowances for these previous experiences, and all sections of the module were required for all faculty members preparing to teach their first online course through GPU. Sections of the training module could not be taken separately if the faculty member had a specific need for only certain topics within the module, and faculty members were also not able to audit any parts of the training module for the sake of review without completing it in its entirety. Faculty members said that they were spending valuable time reviewing information they already knew, and others were confused about the inability to take advantage of the materials without completing the entire module.

In order to acknowledge the professional experience of their colleagues, the group recommended that the Provost be given the discretion to allow new faculty members with previous experience teaching online to “test out” of the entire training module or particular sections. This would take place through a discussion of corresponding competencies between the faculty member, the instructional designers, and a faculty member who had completed the training module in a previous semester (Campbell et al., 2009). If it was determined that the faculty member would benefit from taking only a section or two of the training module, arrangements would be made for the faculty to be given access to those sections. In addition, faculty members were given the ability to audit any section of the module at any time, even if they had already completed the training module during a previous academic semester.

The Balancing Act

In summary, an examination of the interpersonal aspects of the working relationship between instructional designers and faculty members allowed the members of the team to make specific recommendations for modifying the training intervention to better align with performance problems. The new training module allowed the instructional designers to share their expertise in designing and delivering instruction online while respecting the domain expertise of faculty members in their respective areas. The revised module presented the best practices from Quality Matters in a way that addressed the instructional designers' sense of professional duty, while simultaneously allowing them to build rapport with their faculty colleagues in a way that would establish productive relationships into the future. The training module no longer accentuated the perceived imbalance in the relationship between instructional designers and faculty members within GPU, and both groups were now able to better interact as colleagues with unique and significant sets of skills that would benefit students taking online courses at the university.

This case illustrates that in order for instructional designers to serve as individual change agents within their institutions, there should be more emphasis placed on the joint responsibility of instructional designers and institutions as a whole. Only with the appropriate amount of support from their institutions can instructional designers affect the type of change that has been discussed as possible in the literature. Despite the fact that instructional design has come a long way since its beginnings within higher education over forty years ago, a case still needs to be made for the value of the instructional design function in this environment. Given the rapid development of online courses and new methods of instructional delivery, the argument for instructional design within higher education is needed now more than ever before.

As evidenced by the situation at North Central Campus, a model of change agency that accurately captures the respective contributions of individual instructional designers and the institution as a whole would be beneficial. It is not sufficient to discuss all of the possible areas in which an instructional designer can initiate change without acknowledging the fact that institutions need to create a culture in which the designers are in a position to make that change a reality. A model of joint change agency and a study of ways in which such a model can be put into action would greatly benefit the instructional design field as a whole and open up possibilities for significant change in the experiences of instructional designers as they work with faculty on a daily basis.

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KEY TERMS AND DEFINITIONS

Change Agent: An individual who advocates for and brings about change within an organization for the expressed purpose of performance improvement. A change agent can bring about change as a result of leadership power in the organization, or as a result of grassroots effort within a particular area of the organization.

Collegiality: A spirit of cooperation and professional friendship between individuals who work together toward shared goals within an organization, even in instances (in this case) where all individuals may not be responsible for the same aspects of those shared goals.

Expertise: A set of knowledge and skills in a specific field of study that sets recognized experts apart from novices in the field. Expertise can be developed through a combination of both educational preparation and practical experience in the field of study.

Faculty Member: An individual who works within a university academic department and teaches courses to undergraduate and/or graduate students in a specific discipline, while simultaneously conducting research within that subject area. The large majority of these individuals have a terminal (doctoral) degree in their discipline.

Instructional Designer: An individual who works within a particular practice setting (higher education in this case) and is involved in the design, development, and/or delivery of instruction in support of courses taught by faculty members. Instructional designers have a wide range of backgrounds, but many of them have a master's degree in an area related to education.

Online Pedagogy: A set of prescribed methods, strategies, and practices for teaching academic subjects in an online (or blended) environment, where students are in a physical location separate from the faculty member and/or other students. While some of the methods and strategies may overlap with those used in a face-to-face environment, online pedagogy recognizes the unique opportunities and limitations of the online environment.

Professional Duty: A sense of adhering to a shared set of standards within a particular profession in order to ensure the competent practice of the duties required by the profession.

Quality Matters: A non-profit organization that provides its members with research, resources, and a professional community for the expressed purpose of promoting quality assurance in online learning within K-12, higher education, continuing and professional education, and various other settings.

Rapport: A professional relationship in which individuals or groups of individuals communicate effectively and are concerned with understanding each other's motivations and feelings.

Relationship Imbalance: A professional situation in which two parties are in a position of inequality regarding control or power within the relationship, usually as a result of structural or organizational realities that dictate certain organizational protocols.

APPENDIX: QUESTIONS FOR DISCUSSION

1. What are your key takeaways regarding performance improvement from the case of instructional designers as change agents within the North Central Campus of Great Plains University?
2. Why do you feel it was important for Dr. Robertson, Randy, and Steve to examine the interpersonal aspects of the relationship between instructional designers and faculty members in higher education before addressing the issues in the existing performance intervention (online instruction training module)?
3. As a performance improvement practitioner, what types of interpersonal dynamics exist within your industry or organization that has the potential to significantly impact the effectiveness of interventions to address performance problems? Create a list of steps you could take to address these dynamics as you implement performance improvement initiatives.
4. How does this case affect your understanding of change agency within an organization and the constraints that may influence the ability to bring about change, especially at the grassroots level? Do you feel it is the organization's responsibility to address or mitigate these constraints?
5. How does your organization address the interpersonal aspects of different professional groups as they interact to work toward the shared goals of the organization? Create a plan for acknowledging and addressing these dynamics as part of your organization's overall performance improvement initiatives.

Chapter 5

Journey to Project Management Program Design: Certification, Alignment, and Quality in Higher Education

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EXECUTIVE SUMMARY

Approaching a project can be considered a journey of discovery. Each person involved has a different background and comes to the table with a diverse perspective. The authors use the analogy of a journey throughout the context of the case study. Providing quality education for university students often includes a journey toward the best approach. This journey entails outlining the appropriate curriculum, finding the appropriate content, establishing dynamic learning objectives and aligning the course with student needs and learning styles. After these criteria are met, the university seeks and selects the most qualified faculty members to teach the course(s). When specialized credentialing requirements are involved, the University must take further steps to ensure that each course meets the standards of the certifying body.

DOI: 10.4018/978-1-7998-0054-5.ch005

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Journey to Project Management Program Design

The context of this journey and enhancement of Davenport University's Global Project Management Program will include three parts. Part I will review recognition that course updates were necessary to meet changes in the latest revision of the Project Management Body of Knowledge (PMBOK® Guide 6th ED, 2017). The university faculty, staff and a consultant with project management credentials developed a consistent process for making updates and ensuring that changes were made to meet requirements. Throughout the consulting phase, principles of Human Performance Improvement/Technology were followed to develop this process. Part II will exhibit a case study that illustrates successful student certification pursuit after completing the capstone course in the program. Part III will review future opportunities for application of performance improvement principles to other projects.

ORGANIZATION BACKGROUND

Since this case study is a journey of discovery and application, background information shows the intersection of three institutions and their processes: Davenport University, the Project Management Institute and the International Society for Performance Improvement. By making necessary updates to the Global Project Management Program, Davenport University ensures that its curriculum provides quality education for students and continuation of the Registered Education Provider designation. Using the principles of performance improvement, the university creates a repeatable process for updates that can be used in this and other circumstances.

Davenport University (DU) is an accredited institution with locations in Michigan and with a global presence online. Davenport is accredited by the Higher Learning Commission ((HLC). The most recent accreditation evaluation was in 2014 when the HLC's Institutional Actions Council voted to approve the extension of the university's reaffirmation date for accreditation to 2021-22. Davenport aspires to be renowned as a quality institution of higher education that understands the market better than any other institution. The university strives to apply this understanding to all programs and teaching, preparing T and its graduates to exceed employer expectations, transform communities and change lives by believing that every person can achieve his or her dream. Davenport is dedicated to providing a quality education for all students. The university's mission statement includes "preparing students to achieve their highest levels of academic performance" (www.davenport.edu, 2019). It is also a military friendly institution. This study will concentrate on the Bachelor of Science in Technology Project Management program.

The Bachelor of Science TECHMPROJ (BSTM) program at Davenport University was created in 2010. In 2011, the name of the program was changed to BS (Bachelor

of Science) Global IT Project Management and in 2014, its name was changed to BS (Bachelor of Science) Technology Project Management. Since 2010, the department continued to refine the program over the years. In 2017, the program underwent a comprehensive review, updating the project management courses to standards set in the new *PMBOK® Guide*. With this goal in mind, the university formed the new Technology Management program with its structure, requirements and continuous improvement processes. The Technology Management program known as TECHMPROJ BS is a 120-credit program that has six specialties: General Technology Project Management, Accounting Information Systems, Computer Information Systems, Health Information Systems, Information Security, Networking, and Professional Focused Technical specialty. With the goals of aligning course content with the Project Management Institute's revisions, the quality and rigor of the program were increased in 2017–18 and the program was reviewed again internally. Because of this extensive review, the program was updated with new *Project Management Body of Knowledge (PMBOK® Guide, 6th Edition)* updated and approved by the Project Management Institute (PMI). The program has matured and become more rigorous.

The Project Management Institute is known as “the world’s leading project management organization with over 500,000 members” (www.pmi.org). To ensure consistent application of project management in multiple disciplines and cultures, the institute established standards and guidelines. These are captured in the *Project Management Body of Knowledge (PMBOK® Guide)*. Both private training companies and universities may apply to become Registered Education Providers that comply with the principles and practices of project management as defined by the institute, including registration marks. This allows the organization to publicize the program through PMI. Students may also obtain Professional Development Units (PDUs) that may apply toward obtaining or retaining project management certification. An applicant for certification must also show evidence of work experience within the areas of project management. Project Management Professional (PMP)® certification is desired when applying for a position in this field. According to the Project Management Institute, “the PMP® is recognized the world over as the gold standard in project management” (www.pmi.org, 2019). As a Registered Education Provider, Davenport University complies with the requirements of the Project Management Institute. As the *Project Management Body of Knowledge (PMBOK® Guide)* is updated, university courses must be updated and aligned.

Davenport University’s Global Project Management Program consists of seven courses. These include: GPMT 287 Principles of Project Management, GPMT 385 Scheduling, GPMT 400 Financial/Risk Management, GPMT 410 Global Sourcing, GPMT 446 Quality, GPMT 490 Internship and GPMT 499. Since the internship

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Journey to Project Management Program Design

course may be offered in the sophomore year, a GPMT 290 version is available. The GPMT 699 is the graduate version of the 499 course. Certified Project Management Professional®. Course design and integration will be discussed to provide a context for the upgrade project.

Course design and discipline for the Global Project Management Program consider components of the project life cycle: “Scheduling and initiating, planning, executing, closing and realizing” (Kloppenborg, 2015, p. 6; *PMBOK® Guide 6th edition*) throughout all courses. The initial course, GPMT 287 provides an overview of all *PMBOK® Guide* process groups: “Initiating, Planning, Executing, Monitoring and Controlling, Closing” as well as the “Ten knowledge areas: Integration Management, Scope Management, Time management, cost management, quality management, human resources management, communications management, risk management, procurement management, stakeholder management” (Kloppenborg, p.9; *PMBOK® Guide*). Instructional design consists of well-organized learning objectives, discussion board questions and quizzes that guide students through the course material. In addition, students form teams and practice project management lessons learned by participating in a simulated house-building project. A computer-generated algorithm provides results and feedback as students practice their skills.

The *Contemporary Project Management* text provides the basic course material for GPMT 287 and is used throughout the remaining courses. Subsequent courses take a “deeper-dive” into the material, based on the course topic. Supplemental texts are added when appropriate, such as Cohn’s book about Agile methodology for GPMT 385 Scheduling. The program culminates in the completion of GPMT 499/699 as a preparation for students to take the Project Management Professional (PMP)® exam.

The case study in this chapter follows university staff and the consultant during their journey to update course content and alignment with *PMBOK® Guide* updates and PMI requirements. Although there are seven courses within the Global Project Management Program, this case will concentrate on GPMT 287 (initial course) and GPMT 499/699 (capstone course).

While project management concepts were applied during the case, the participants also applied Human Performance Technology (HPT) principles. The International Society for Performance Improvement promotes this systemic and systematic approach by applying the “process, tools, and techniques to accomplish the improvement” (Van Tiem, Moseley, Dessinger, 2012, p.6). Roger Chevalier (2004) described Human Performance Technology as “the systematic and systemic identification and removal of barriers to the individual and organizational performance” (Moseley and Dessinger, 2010, p. 367). The consultant felt that taking this systemic (big picture view) and

systematic (repeatable process) approach was appropriate to ensure consistency in current and future course updates. Human Performance Technology includes taking the human side of all actions required to improve performance while applying science and research methods to the process (Pershing, 2006; www.ispi.org, 2019).

According to the International Society for Performance Improvement, “there are ten standards that competent practitioners follow in the practice of human performance technology” (ISPI, 2013). The term technology in relationship to the standards is the “science behind the application” of the principles (Pershing, 2006, p.xxxi). The following descriptions are based on a summary of standards as shown in the *Handbook of Improving Performance in the Workplace*:

Focus on results and help clients focus on results

Look at situational systematically, taking into consideration the larger context, including competing pressures, resource constraints and anticipated change

Add value in how you do the work and through the work itself.

Utilize partnerships or collaborate with clients and other experts as required.

Be systematic in all aspects of the process, including the assessment of the need or opportunity.

Be systematic in all aspects of the process, including the analysis of the work and workplace to identify the cause or factors that limit performance.

Be systematic in all aspects of the process, including the design of the solution or specification of the requirements of the solution.

Be systematic in all aspects of the process, including the development of all or some of the solution and its elements.

Be systematic in all aspects of the process, including the implementation of the solution.

Be systematic in all aspects of the process, including the evaluation of the process and the results (Moseley and Dessinger, 2010; www.ispi.org, 2019).

Journey to Project Management Program Design

Further details regarding application of the human performance technology principles and standards can be found on the International Society Performance website under the “Get Certified” section.

SETTING THE STAGE

Providing quality education for university students often includes a journey toward the best approach. This journey entails outlining the appropriate curriculum, finding the right content, establishing dynamic learning objectives and aligning the course with student needs and learning styles. After these criteria are met, the university seeks and selects the most qualified faculty members to teach the course(s). When specialized credentialing requirements are involved, the university must take further steps to ensure that each course meets the standards of the certifying body.

The context of this journey and enhancement of Davenport University’s Project Management Program will include three parts. *Part I* will review recognition that course updates were required to meet changes in the latest revision of the *Project Management Body of Knowledge (PMBOK® Guide)*. University staff and a consultant with project management credentials developed a consistent process for making updates and ensuring that changes were made to meet requirements. Throughout the consulting phase, principles of Human Performance Improvement/Technology were followed to develop this process. *Part II* will exhibit a case study that illustrates successful student certification pursuit after completing the capstone course in the program. *Part III* will review future opportunities for application of performance improvement principles to other projects.

CASE DESCRIPTION

Part I: Alignment of Course Curriculum to Certification Requirements

When Dr. Gabriela Ziegler, Davenport University’s Department Chair for Computer Information Sciences, learned that the Project Management Institute’s *PMBOK® Guide* was entering its 6th edition, she knew that her Global Project Management Program would require updates. She called upon Dr. Nancy Crain Burns of Crain Burns Associates, LLC to lead the project. Dr. Burns specialized in project management during her years as a corporate financial services manager. She had also served the

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university for several years as an instructor and Teaching and Learning Coordinator. With these experiences, she was familiar with project management requirements, as well as Davenport's Global Project Management program courses.

In her former role as Teaching and Learning Coordinator, Dr. Burns previously led the university through a course update process. As a consultant with Crain Burns Associates, LLC, she prepared a proposal for the University that was approved by Dr. Ziegler and Dr. Pamela Imperato, University Dean of Maine College of Business and Technology. Components of the proposal included a scope definition and refinement stage, partnering with university staff and instructors and reviewing global project management course materials for compliance with the new requirements.

As a Certified Performance Technologist through the International Society for Performance Improvement, Dr. Burns knew the importance of following a systematic process. Aspects of Project Management and Performance Improvement were incorporated with the Global Project Management Update effort. In 2002, the International Society for Performance Improvement introduced the Certified Performance Technologist Designation. To qualify for the certification, a practitioner must exhibit practicing all ten standards across multiple projects. These standards include: (1) "Focus on results or outcomes, (2) Take a systemic view (3) Add value, (4) Work in partnership with clients and stakeholders, (5) Determine need or opportunity, (6) Determine cause, (7) Design solutions including implementation and evaluation, (8), Ensure solutions' conformity and feasibility, (9) Implement solutions, (10) Evaluate results and impact" (www.ispi.org, 2019). When these standards are applied, solutions are more likely to be based on the real need rather than assumptions.

From Dr. Burns' perspective, preparing for the journey included bundling project management expertise along with certified performance technologist credentials. She prepared a framework for the plan prior to meeting with Dr. Ziegler. As a Department Chair, Dr. Ziegler had the overall expertise and view of program requirements. Leading resources on the journey to success were part of her responsibility. When approaching the project, Dr. Burns initially met with Dr. Gabriela Ziegler to assess her needs as a stakeholder and determine the agenda for the kickoff meeting with the staff. Faculty members were also project management professionals and had expertise in the course materials. Therefore, the best resources were assigned to the project. Other project members included the Dean's Administrative Manager who could update the website, as well as the university's PMI® Registered Education Provider representative.

Scope definition for the project included updating all global project management written course materials, online course content, university website and the Project

Journey to Project Management Program Design

Management Institute's Continuing Certification Requirement System. The team collaboratively determined the timeline, based on when courses were scheduled to run and complexity of the material. For example, the capstone course Global Project Management (GPMT 499) had additional tests that needed review and update. There was also dependency on an external vendor for some information. Identifying success criteria is an important component for both project management and performance improvement principles. "Beginning with the end in mind" as touted by Stephen Covey (Kruse, 2012) and "focusing on results" (www.ispi.org, 2019) helped the team to establish goals and know when success was achieved.

The project was selected because it was necessary to update the courses for compliance with Project Management Institute standards and the new *PMBOK® Guide 6th Edition*. Initiation began with proposal acceptance and Dr. Burns' initial meeting with the department chair, Dr. Ziegler. The project team reviewed the latest Project Management Institute's requirements for copyrights and trademarks in addition to *PMBOK® Guide*, 6th edition updates. This was done to ensure compliance. The project life cycle included the steps of "selecting and initiating, planning, executing, closing and realizing" (Kloppenborg, 2015, p 6; *PMBOK® Guide*, 6th Ed. 2017).

During the kickoff meeting, a communication plan was created. The plan included a timeline for scheduling meetings, creation of a team Gmail account and Google Drive. This allowed collaboration among team members. Stakeholders who were not part of the core team were identified and notified about the project. Team members agreed upon roles and responsibilities and established an update protocol. Team members provided input to create the initial project schedule. Prioritization of courses was completed, and phases were established. Each phase was based on the semester course update deadlines as well as availability of resources. Execution of the project included course update, review, verification and online change completion. The documents for the university's database were also updated and posted. In addition, the website was updated and reviewed for each course description and marketing purposes. To ensure that the process could be repeated on future projects, the team created a job aid. The job aid (shown in Table 1) consisted of a checklist, following process steps and approval levels.

The project "close-out" phase included a final meeting with the team to ensure that all work was completed. This allowed for a verbal evaluation of the project process and acknowledged project satisfactory completion. The team reviewed the job aid created for the process and agreed that it was appropriate. Creation of the final project close-out evaluation survey included both a traditional Likert scale and questions based on Thalheimer's (2016) suggestion that it is important to apply a feedback

Table 1. The university certification review process job aid

University Certification Review process	Person responsible	Complete
Certification process understanding		
University understands Certification Review process and timing requirements (The application and agreement note that ABC organization will review your organization and selected courses every 3 years. All organizations are subject to periodic audits)	Dept. Chair/PM Faculty Lead	
Review all applicable publications, including the ABC Handbook, Review: Application and Agreement, Intellectual Property Guide, Program Resources, Global Standards, Trademark Usage Guidelines, Library of ABC Global Standards	Dept. Chair/PM Faculty Lead	
Review checklist in ABC Application and Agreement	Dept. Chair/PM Faculty Lead	
Academic and External offering representatives are involved in the review process	External/ Academics	
Representative and Faculty credentials		
University has a structured process for selecting qualified instructors.	Dean/Dept. Chair	
Once we have selected the qualified employee to teach our project management courses, we credential each faculty to determine which courses and at what level the candidate would be able to teach. Department Chairs in each department follows the following credentialing requirements:	Dean/Dept. Chair	
The Department chair will assess the documentation provided by the applicant for a faculty position and take into consideration the credentialing criteria established, accreditation and/or discipline specific requirements, and any specific program related requisites, to make the preliminary credentialing recommendation. This recommendation will then be forwarded to the College Dean for further review.	Dean/Dept. Chair	
<i>Only accredited faculty are hired to teach courses</i>	Dean/Dept. Chair	
See Credentialing Process & Form (highlights listed below)		
Faculty teaching courses have experience in the field	Dean/Dept. Chair	
Faculty teaching courses participate in learning activities and mentoring to update skill set and remain competent in teaching methods	Dean/Dept. Chair	
Instructional Designers review courses for alignment with objectives, content balance and user interface	Dean/Dept. Chair	
Use Classroom Observation Form & Check List	Dean/Dept. Chair	
Copyright		
All materials, content and webpages are appropriately marked with registration information	IPEX/Academics	

continued on following page

Journey to Project Management Program Design

Table 1. Continued

University Certification Review process	Person responsible	Complete
All materials, content and webpages are appropriately marked with author/publisher information	IPEX/Academics	
Assessment		
University course evaluation is used for continuous course improvement	Dept. Chair/PM Faculty Lead	
University course evaluation measures whether instructional methods help achieve the outcomes	Dept. Chair/PM Faculty Lead	
University outcome evaluation measures achievement of learning outcomes	Dept. Chair/PM Faculty Lead	
Class Observation Form & Appendix C Online Weekly Progress Check List		
Course Content		
Course content meets ABC requirements, including required topics	Dept. Chair/PM Faculty Lead	
Course content, learning outcomes, objectives and assignments are aligned	Dept. Chair/PM Faculty Lead	
Learning objectives for the course include measurable outcomes	Dept. Chair/PM Faculty Lead	
Assignments are aligned to learning objectives	Dept. Chair/PM Faculty Lead	
Course material/content from other authors/resources are properly identified and agreements are in place for usage (Identify courses when licensing material as appropriate)	Dept. Chair/PM Faculty Lead	
Davenport accreditation standards are reviewed in conjunction with requirements. Courses are listed in the course catalog.	Dean/ Dept. Chair/	
Approval for submission to ABC	Dean/ Dept. Chair	
Appropriate review/approval must be obtained prior to submission. Resources include: Subject Matter Expert, Instructors, Teaching and Learning Coordinator, Registered Education Provider Representative, Associate Department Chair, Department Chair, Deans,		
2018 Crain Burns Associates LLC /Davenport University		
Sample Job Aid Certification Criteria Process		

mechanism that enables effective learning assessment. Participants were asked to reflect on the level of learning that they could apply to the job. The population for the Implementation team survey included five faculty members at the university. The project close-out survey shown in Figure 1 allows the participant to answer questions that allow “in-depth” assessment of application to the job.

Figure 1a. DU global project management project close-out survey

DU Global Project Management Close Out Survey

DU Global Project Management Close-out survey. Please note that there are three parts to the survey. Part I- Traditional Likert scale; Part II -One question designed

Part I (Please answer based on your experience with the project.) This is a 5 point scale with 5 as the highest rating.

* Required

1. The project purpose was clearly defined *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

2. Meeting agendas were clear *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

3. Team member input for the project schedule was welcomed *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

4. Team member input for the project scope was considered *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

5. Meetings were well-organized and interactive *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Journey to Project Management Program Design

Figure 1b. Survey continued

6. I feel that I have a better understanding of Davenport needs for meeting PMI requirements *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

7. I feel that I can apply my understanding of PMI requirements to future courses *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

8. The training session will enable me to prepare course input for the database *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

9. My input for process improvements was taken into consideration. *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Davenport University Department Experience From Global Project Management Update Project

The experience of the Department of Computer Science (CS) at Davenport University (DU) resulted in aligning its Bachelor of Science Technology Management (BSTM) curriculum with the PMI® Registered Education Provider (REP) project management requirements established by the Project Management Institute. The case study describes the challenges of aligning the BSTM curriculum with *PMBOK® Guide* program requirements, followed industry standards and supported the attaining of program outcomes. Besides, it was necessary to adapt to the university overall processes. Alignment was demonstrated with specific examples. The alignment process followed the Certified Performance Technologist (CPT) standards: 1) “Focus

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Figure 1c. Survey continued

Part II

(Please note: The question below is written using a new survey technique. Please answer by choosing A, B, C, D or E and showing an "X" in the box next to

10. In regard to project content, HOW ABLE ARE YOU to put what you've learned into practice on the job? (Please choose one) *

Mark only one oval.

- A. I'm not at all able to put the concepts into practice
- B. I have general awareness of the concepts learned, but I will need more training/practice/guidance/experience to do actual job tasks using concepts learned
- C. I am able to work on actual job tasks but I'll need more experience to be fully competent in using the concepts learned.
- D. I am able to perform actual job tasks at a fully competent level in using the concepts taught.
- E. I am able to perform actual job tasks at an expert level in using the concepts taught.

Part III Please provide insight regarding the Part II question

//docs.google.com/forms/d/1VFPZV7OoNkLbcFLjokG9ZupONRfDGu4vAIKEwtJb7Jo/edit

2/3

2019

DU Global Project Management Close Out Survey

11. 1. Was the question in Part II easy to follow? *

Check all that apply.

- No
- yes

12. Do you think the question provides a clear reflection regarding how you are able to apply concepts learned during the project? Yes *

on results or outcomes” by concentrating on aligning the BSTM curriculum to Project Management Institute’s program requirements; 2) “take a systemic view” by looking into the whole curriculum, curriculum requirements for project management and university related processes; 3) “add value” by creating a replicable job tool and process to complete the curriculum alignment; 4) “worked in partnership with clients and stakeholders” by aligning the curriculum as a collaborative effort between the Project Management consultant, university GPMT team and college leadership; 5)

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Figure 1d. Survey continued

13. If not, please explain your thoughts.

14. Please list other comments/suggestions you have for future projects *

“determined a need or opportunity” by seeking PMI® REP certification, the BSTM would demonstrate that it meets standards essential to produce graduates ready to enter the critical fields of project management education and the need to focus on student achievement; 6) “determine cause” by recognizing the need to change the BSTM curriculum to meet PMI® REP program requirements and focusing on student outcomes achievement; 7) “design solutions including implementation and evaluation” by developing alignment process, and evaluation tools; 8) “ensure solutions’ conformity and feasibility” by developing an PMI® REP certifiable technology management curriculum; 9) “implement solutions” by changing the curriculum and completing alignment process; and 10) “evaluate results and impact” by developing an assessment plan to measure the attainment of student outcomes (www.pmi.org, 2019; www.ispi.org, 2019). The overall outcome of the Global Project Management update project resulted in the university’s renewal of their Registered Education Provider status by the Project Management Institute.

Part II: Measurement of Student Achievement as a Result of Capstone Course Completion

Note: In Part II, Dr. Ziegler reviewed student achievement after completing the capstone course in the program. Her research followed the premise of the theme “Journey to Project Management: Certification and Alignment in Higher Education at Davenport University.”

The topic for this research study is to describe challenges and triumphs encountered through a certification and alignment of project management principles/requirements in higher education. The case study will include data to assess the success rate of students taking Global Project Management (GPMT) 499 (undergraduate course) or GPMT699 (graduate course) and their pursuit of the Project Management Professional (PMP)® certification at the Project Management Institute.

In today’s global economy, organizations need professional project management techniques to manage complex projects with increasing scope, scarce resources and restrictions related to human resources, materials, financial resources, quality, and performance (Zdanyte & Neverauskas, 2011). Project management is a set of tools that organizations use to plan, implement, and manage activities to accomplish specific organizational objectives. Additionally, project management requires a results-oriented management style (Gray & Larson, 2006).

Many global organization job descriptions require certified professionals with proven experience to manage their projects. The Project Management Institute (PMI) is the world’s largest project management member’s association. The organization reports a membership of approximately 500,000 practitioners and 280 local chapters internationally. It is present in more than 207 countries and in 6 continents (www.pmi.org, 2018). Starkweather and Stevenson (2011) described the PMP® credentialing process and its significance in the field of project management. The authors argued that PMP® credentialing denotes the mastery of the skills, experience and core body of knowledge in project management. PMI also has the difficult task to ensure that the professional standards included in the certification exam truly reflect the best practices within the project management discipline (Starkweather & Stevenson, 2011). According to Starkweather and Stevenson “...the rapid production of new discipline knowledge creates a continual challenge for credentialing organizations” (2011, p. 31).

According to PMI (2018), passing the PMP® exam gives credentialed individuals recognition of acquiring the required experience, education and competitiveness to lead complex projects in any industry. To be eligible to take the PMP® certification exam, students need to have a four-year college degree with 4,500 hours of project

Journey to Project Management Program Design

management experience and 35 hours of formal education in project management. If students do not meet these requirements, they may have a high school diploma with 7,500 hours of experience leading projects and 35 hours of formal education in project management. After passing the PMP® certification exam, there is a continuing education requirement in which PMP® accredited individuals need to earn 60 hours of professional development units (PDUs) during a three-year cycle (www.pmi.org, 2018).

The Project Management Institute's book used to prepare for the organization's PMP® certification exam is *A Guide to the Project Management Body of Knowledge® (PMBOK® Guide, 6th Ed. 2017; www.pmi.org, 2018)*. The *PMBOK® Guide* was first published in 1996 and has been updated several times, most recently in 2017. The *PMBOK® Guide* contains the body of knowledge for project managers in five Project Management Process Groups: "Initiating, Planning, Executing, Monitoring and Controlling, and Closing" and nine Knowledge Areas: "Project Integration, Scope, Time, Cost, Quality, Risk, Procurement, Communications, and Human Resources" (*PMBOK® Guide 6th Edition, 2017; www.pmi.org, 2018*).

Another important consideration to be PMP® certified is the economic incentive that this certification brings. According to the PMI Project Management Salary Survey (www.pmi.org, 2018) salaries of project managers continue to increase. The median annualized salary in the United States is \$105,000. As an example, Europe, Germany, and Australia had a median annualized salary of over \$112,000. According to the PMI Project Management Survey, the highest project management salaries in 2018 are reported from Switzerland with an average salary of \$130,966.00. Results of the survey showed that 82% of survey respondents with the Project Management Professional (PMP)® certification reported higher median salaries than those without a PMP® certification (www.pmi.org, 2018).

Passing the PMP® exam and achieving the certification is not an easy task. The Project Management Institute recognizes many organizations that offer training on PMP® certification exams. Some institutions of higher education, such as Davenport University, have developed project management programs under the PMI® Registered Education Provider umbrella. Davenport University offers a Bachelor of Science in Technology Management with a major in Global Project Management. One of the required courses in the Technology Management program is GPMT499. According to the Davenport University Undergraduate Catalog (2017), the GPMT499 course has the objective to prepare students for the Project Management Professional (PMP)® certification examination. This exam-preparation course provides a focused review of all subject matter for the PMP® Certification. Faculty members teaching this course rely on sample exams, helping students familiarize with the real test regarding format, content, and nature of the exam. The Project Management Institute (PMI)

Table 2. T University PMP® Success Survey

<p>PMP® Certification Success Journey to Project Management, Certification and Alignment in Higher Education * Required</p>
<p>1. I am PMP® certified * Check all that apply. <input type="radio"/> No <input type="radio"/> Yes</p>
<p>2. I obtained my PMP® certification * Mark only one oval. <input type="radio"/> Less than a year <input type="radio"/> 1 to 2 years ago <input type="radio"/> 3 to 4 years ago <input type="radio"/> 5 or more years ago <input type="radio"/> N/A</p>
<p>3. Taking the GPMT 499 or GPMT 699 course helped me obtain my PMP® certification * Mark only one oval. <input type="radio"/> Strongly Agree <input type="radio"/> Agree <input type="radio"/> Neutral <input type="radio"/> Disagree <input type="radio"/> Strongly Disagree</p>
<p>4. The materials in GPMT499/699 were easy to use * Mark only one oval. Strongly Agree Agree Neutral Disagree Strongly Disagree</p>
<p>5. I recommend students seeking PMP® certification to take GPMT499 or 699 * Mark only one oval. <input type="radio"/> Strongly Agree <input type="radio"/> Agree <input type="radio"/> Neutral <input type="radio"/> Disagree <input type="radio"/> Strongly Disagree</p>
<p>6. How many years of work experience in project management do you have? Mark only one oval. 1-2 years 3-4 years 5-6 years 7 years or more</p>
<p>7. Which gender do you identify with? This question is optional. Mark only one oval. <input type="radio"/> Male <input type="radio"/> Female</p>
<p>8. What is your age? This question is optional. Mark only one oval. <input type="radio"/> 18 or under <input type="radio"/> 19-29 <input type="radio"/> 30-40 <input type="radio"/> 41-51 <input type="radio"/> 52 or older</p>
<p>9. How would you improve the certification preparation course (GPMT499 or GPMT699) you took?</p>

Journey to Project Management Program Design

created the PMP® examination, and the same institution administers and manages the exam.

The researchers surveyed students who have taken GPMT499 or 699 in the last five years to assess if training in the preparation course helped to obtain their PMP® certification. The Davenport PMP® Student Success Survey is shown in Table 2.

Research Questions

This case study was guided by three research questions:

1. What were the challenges and triumphs encountered through a certification and alignment of project management principles/requirements in higher education?
2. How has the university applied performance improvement principles to the processes of course design to ensure alignment to PMP® certification?
3. How does the certification preparation course GPMT499 or GPMT699 help in obtaining the PMP® certification?

Validity, Reliability and Cultural Competence

According to Creswell (2018) it is important to test the instrument to determine whether the sample of participants will be able to respond to the survey and to ensure that the questions are clear. A pilot test of the survey is the procedure in which the researcher reviews the instrument based on the feedback from a small number of individuals.

The PMP® certification exam is developed using a role delineation study. The role delineation is a certification standard for establishing valid and reliable examinations. In August 2012, PMI's Certification Governance Council approved the PMI role delineation study. The delineation study revised the domain tasks to better qualify the role of the project manager. The review process involved feedback from 1,526 managers from 87 different nations. From these 1,526 managers, 32% were PMP® certified individuals. The study reported that the responses met the statistical relevance reflecting the professional around the world and according to standard demographics (www.pmi.org, 2018). In 2017, the Project Management Institute released the *PMBOK® Guide, 6th Edition* and updated the PMP® exam.

There were two instruments selected for this case study: a short survey for Davenport students and graduates who have completed the preparation course. This survey asks if they were PMP® certified and the number of years since earning their certification. Participants were also asked: if the certification preparation course helped; if they recommended that others take the preparation course and demographic

information. The other instrument selected for this study was the PMP® certification exam. The extensive testing, review of the questions and the effort to incorporate standard demographics, made the PMP® certification exam culturally appropriate.

Perry and Felce (ND) described the importance of evaluating social competencies when collecting data. The social competency related to this study is more related to occupational competence: the satisfactory performance of being a project manager, or in the specific case of this study, the satisfactory performance of the social aspect of being a student of project management. Work setting is the second most important context of social relationships. According to Perry and Felce, “Social competence is therefore seen as a composite of four sets of skills: (a) discriminating situations in which social behavior is appropriate... (b) choosing appropriate verbal and non-verbal social skills... (c) performing these social skills fluently... and (d) accurately perceiving the other person’s verbal and non-verbal cues and adjusting to this feedback...” (ND, p.3). The authors also explained that competence can be situational specific, as it would be in this specific research study. Students answering the proposed survey will need the ability to follow the survey’s instructions. The instructions in the survey need to be simple and to be acted on as the survey is answered. The PMP® certification examination was used in this case study without modifications. The Project Management Institute has done extensive research and testing, indicating that this certification exam is valid and reliable.

Research Method and Design

The research method selected for this research was a case study, According to Yin (2018) exploratory research questions such as investigate how things happened and what happened, lead to a case study research method. Creswell (2018) and Yin (2018) explain that case studies use the same techniques as a history. Yazan (2018) studied three different approaches to conduct research. According to Yazan (2018), Yin, Merriam and Stake were the three seminal authors on completing case study research. Yin (2002) in Yazan (2018) defines case as “a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context” (p. 13). Yin (2002, 2018) developed a very structured approach to complete case study research: construction of research questions, collection and analysis of data. Case study research had the following critical components: research questions, propositions, unit of analysis; the logic linking the data; and the criteria for interpreting the findings (Yazan, 2018). Merriam (1998) included in the case study research methodology, conducting a literature review, constructing a theoretical framework, identifying a research problem, crafting and sharpening

Journey to Project Management Program Design

research questions, and selecting the sample. In summary, Harrison, Birks, Franklin and Mills (2017) concluded that a case study needed to be used to obtain a greater understanding of an issue in real life.

This case study used documents, artifacts, interviews, and observations. Additionally, in this case study a small survey of students was included. The main purpose of this case study was to explain a set of decisions in light of the reasons that were determined; elaborate on how the decisions were implemented, and to describe the results of such implementation (Yin, 2018). This case study illustrated the challenges and triumphs encountered through a certification and alignment of project management principles/requirements in higher education and how the university applied performance improvement principles to the processes of course design to ensure alignment to PMP® certification. The case study additionally answered the question regarding how the certification preparation course GPMT499 or GPMT699 helped students in obtaining the PMP® certification.

The case study used two different online surveys. The first online survey, Student survey, was used to assess if the PMP® preparation course at Davenport University (DU) (GPMT499 or GPMT699) helped students to obtain their PMP® certification. Students' surveyed took the preparation course in the last five years. The second online survey, Project Close-out survey, was used to assess if the Global Project Management course update implementation team at Davenport University successfully completed the course update project while applying Project Management Institute requirements as well as the whether the process followed during the Global Project Management course updates were easy to follow and apply.

Population

The population used for the Student survey was comprised of 241 students. They took the PMP® preparation course at Davenport University in the last five years. The population included current students of Davenport University who had graduated from the colleges of business, technology and health professions, at the undergraduate and graduate level. The population for the close-out survey consisted of five faculty/staff members who were involved in the course update project.

Informed Consent and Confidentiality

All participants in this study received the Informed Consent form which requested their signatures. Students or faculty that did not return the signed consent form were not included as participants in the research. Participants were not identified by their

names or college affiliation in any documents. Consent forms gave participants the opportunity to withdraw from the research study at any time. Students or faculty who would have liked to stop their participation in the research study could have e-mailed or called the researchers to withdraw from the study. Subjects could withdraw from the study without any penalty. On the Informed Consent form, participants were asked to leave their e-mail addresses in the demographic portion of the survey to enable identifying the participant's submittal in the event the participant wished to withdraw from the study after submission of the responses. There were no withdrawn subjects from this research study.

A Premises, Recruitment, and Name (PRN) Use Permission form was obtained for this research study. Students or faculty did not receive compensation for taking part in this research study. Students' information will not be disclosed to third parties. The researchers obtained permission from the institution to receive access to email addresses and email lists from the university authorities. Participants answered an online survey that took approximately 10-minutes to complete. The researchers prepared an email for students and faculty that included the researchers' contact information. The contact information included the study title and researchers' contact information such as names, email addresses, and phone numbers. The e-mail invited subjects to participate in the research study and included the consent form providing the information to help them decide if they wanted to participate in the study. The letter answered the following questions: "What was the study about? Why am I being asked to be part of the study? How many people were in the study? Who was paying for the study? Did it cost anything to be in the study? How long was my participation in the study? What did happen during the study? How did participating in this study help me? Were there risks to me if I were in this study? Did I get paid? Did I have to be in this study? Who did use and share information about being in this study? Who could I talk about the study? What was the time commitment?" (Davenport, 2018). The email clearly stated that although no study is completely risk-free, researchers did not anticipate that participants were going to be harmed or distressed during the study. Participants could withdraw from the study at any time if they became uncomfortable in any way.

This information would be kept for four years in a secure location belonging to the researchers. Secure data management systems would provide further security of coded data and data analysis. After these four years, data would be sent to a contractor company that would dispose all confidential data from the university. Faculty/staff members were not identified by their names or colleges in this research study.

Instrumentation

The researchers of the study designed both surveys used in the case study. The student survey was pilot tested within a group of volunteers (three), who were similar to the intended population. The purpose of the pilot test was to make sure that the questions included in the survey were not confusing, that nothing was missing, and logic behind questions answered. The authors developed items based on the construct definition and description. All constructs were measured as perceptions of the respondents. The project close-out survey was used to evaluate the effectiveness of the course update project.

Data Collection

All participants invited to take the survey had the opportunity to answer the survey. A follow up email was sent two weeks after the original online surveys were sent to remind participants to complete the online survey. The online survey was formatted using Google Docs forms and distributed using Google email. The university used Google Mail as their standard e-mail, and all students included in the study had access to Google Mail. The researchers had permission from the university to access students email addresses and e-mail lists at the university.

Campbell and Stanley (2015) argue that the threat of low statistical power was present when the population estimate's size was less precise and might incorrectly conclude that cause and effect did not covary. This research study used a $p=0.5$ as the statistical level of significance. Using the Lipsey table, this research study needed 134 students to answer the survey to be considered statistically significant (Campbell & Stanley, 2015).

Results Regarding Certification and Student Achievement

The survey was given to 241 students who took preparation course last five years. Demographics included 40% of respondents between 30-40 years and 35% of respondents between 41-51 years of age. Female respondents represented 43% of the population and male respondents represented 55%. There were 20 responses ($n=241$ Answers=20), so the level of responses was not statistically significant. Interesting results showed that 15% of students have taken their PMP® certification exam; 70% of students thought materials in the course were easy to use and 80% would recommend taking a certification preparation course.

Students surveyed recommended the following improvements to the certification preparation course: Four percent of the respondents recommended to include

“awareness of what book-based project management would look like, utilizing traditional waterfall methodologies. Within the IT industry, more companies are utilizing Agile/SCRUM or XP, which I was not prepared or aware of during any of my project management Davenport courses.” “Include new editions to the book to have the most current edition” (4.3%). The survey was distributed to students that took the preparation course in the last five years. Students in the survey indicated that too much time had passed since they took the preparation test (4.3%). As indicated, the level of responses (20 form n= 240) is not statistically significant, but there were some interesting results that would bring improvement to the program such as *the* decision to distribute the survey six months after the preparation for certification course is completed.

The university’s assessment of qualitative responses must take the timing of the survey and student experiences into consideration. For example, Agile/Scrum has been part of the GPMT 385 *Project Scheduling with Agile* course since the 2013-2014 academic year. Some students completing the survey may have experienced an earlier version of the course that did not contain Agile methodology. The *PMBOK® Guide*, 5th edition (2018) covered some aspects of Agile while the *PMBOK® Guide* 6th Edition (2017) discussed the Agile approach and environments in greater detail across multiple functions, such as: “control scheduling process, tailoring considerations, cost estimating, communications management, cost management, integration management, procurement management, resource management, risk management, quality management, schedule management, scope management, stakeholder engagement and release planning” (pp. 727-728). Technology rapidly changes in the marketplace and often textbook publishing may lag behind its introduction. Davenport University faculty does monitor marketplace changes and incorporates exercises that reflect these changes. The university may choose to be more diligent in this area. Since the university would like to see more students complete the exam, the administration may encourage faculty members to remind students that timely exam completion may contribute to higher success. Continuing the surveys as planned will enable the university to better track the results.

The alignment project with PMI requirements updated all book editions and *Project Management Body of Knowledge (PMBOK® Guide*, 6th edition), published in 2017. Although the results of the survey were not statistically significant, the university gained knowledge that will lead to encouraging students to take the certification exam. The university will also survey the students for two years, two months after they complete the preparation course. Taking these steps will enable Davenport University to continuously improve the course to enhance student success.

Part III: Application of Performance Improvement Standards and Future Opportunities

After the Global Project Management course update project was completed, the university recognized that the process implemented could be used to manage future projects. Since Dr. Burns shared the Performance Improvement (PI) principles applied during the Global Project Management course update project, Dr. Ziegler felt that the process could be used on future changes to the Project Management Institute requirements and also for other types of accreditation. For example, Dr. Ziegler incorporated performance improvement principles in her approach for application review to ABET accreditation (Accreditation Board for Engineering and Technology). Further details of this accreditation can be found on the ABET website (abet.org). Applying the principles to a future accreditation will allow the university to validate the research in another area, as well as use for a future study.

CONCLUSION

After the Global Project Management course update project was completed, the university recognized that the process implemented could be used to manage future projects. Since Dr. Burns shared the Performance Improvement (PI) principles applied during the Global Project Management course update project, Dr. Ziegler felt that the process could be used on future changes to the Project Management Institute requirements and also for other types of accreditation. For example, Dr. Ziegler incorporated performance improvement principles in her approach for application review to ABET accreditation (Accreditation Board for Engineering and Technology). Further details of this accreditation can be found on the ABET website (abet.org). Applying the principles to a future accreditation will allow the university to validate the research in another area, as well as use for a future study.

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KEY TERMS AND DEFINITIONS

Accreditation: The process of reviewing and evaluating products, programs, services or functionality, measuring with defined standards. This includes acknowledgement from a third party that the project submitted has met or exceeded these standards (www.association trends.com, 2016; halecenter.org, 2019).

Certification: Proof and/or attestation that an individual has achieved competency in an area of work and/or application of knowledge. Recognition that an individual is “certified” is normally issued by an organization authorized to grant such acknowledgement.

Certified Performance Technologist: This term is also identified by the acronym “CPT.” The individual who earns the designation has illustrated application of ISPI (International Society for Performance Improvement) standards across projects. The application is peer-reviewed, using a double-blind process and requires attestation from leaders/managers and/or others who verify that the principles have been used to successfully complete a project (Van Tiem, Moseley, Dessinger, 2012; www.ispi.org 2019).

Journey to Project Management Program Design

Human Performance Technology: This term may also be identified as the acronym “HPT.” It is synonymous with the term “performance improvement/technology.” There is always a human factor in the process and performance (achieving results) in the process. The term “technology” refers to the science and application of the process. According to the International Society for Performance Improvement (ISPI), there are ten standards that are applied when following the process: (www.ispi.org).

Performance Improvement: This term may also be identified as the acronym “PI.” It is synonymous with the term “human performance technology.” There is always a human factor in the process and performance (achieving results) in the process. The term “technology” refers to the science and application of the process. According to the International Society for Performance Improvement (ISPI), there are ten standards that are applied when following the process (www.ispi.org).

Project Management: When a temporary endeavor is defined with a clear beginning and end, it is considered a “project” rather than an ongoing “operation.” The term Project Management refers to the systematic approach to oversee this temporary endeavor. The Project Management Institute has defined this type of management as “the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements” (www.pmi.org, 2019).

Quality: Achievement of a defined level of success criteria for a project, product or service. Quality is measured according to customer, legal or other requirements to meet or exceed identified standards.


APPENDIX: QUESTIONS FOR DISCUSSION

1. Why do you think is necessary for a university to align project management standards and/or performance improvement standards to its project management curriculum?
2. Read the summary of human performance technology standards in the case. How can you apply performance improvement concepts to your work or project?
3. Identify challenges you have faced when first learning about a project that has time constraints. List and describe the steps that you need to take when approaching a major project.
4. Discuss the advantages of creating a process and/or a job aid so that it can be used on future projects.
5. Why is it important to measure the value of a project when working with a client?
6. Why is it important for the university to measure students' success and follow up after completing an exam preparation course?

Chapter 6

Improving Performance, Self-Efficacy, and Motivation: Structured Online Training and Authentic Learning

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EXECUTIVE SUMMARY

Suzy Whitman, an experienced instructional designer and program manager, was hired to coordinate a new online graduate program at a large university. It was Suzy's responsibility to identify and implement solutions to the rapidly growing program's needs. Identifying problems, evaluating the need, thinking through a modification and implementation process, and considering the potential impact of change, are all important steps. In this case study, Suzy needed to identify the problems, determine a solution, and then implement that solution. After speaking with her new supervisor, Suzy determined additional instructors needed to be hired to meet the growing program's needs. Although Suzy did briefly analyze the situation and provide a potential solution, the solution Suzy implemented needed further development to ensure it was implemented in an effective manner.

DOI: 10.4018/978-1-7998-0054-5.ch006

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ORGANIZATION BACKGROUND

Spector University is a large university in the United States that has provided quality education for hundreds of thousands of students. Established in the early 1900s, the university is located in a quiet area of the Southwest and has a history of excellence in education. The Learning Design and Technology (LDT) program at Spector University had traditional face-to-face graduate programs (masters and doctoral) for nearly four decades. Run by a small team of six faculty, the LDT program had seen strong success for many years but was seeing a decrease in enrollments with many students citing the location of the university as a factor in their choice to decline enrollment. Although the enrollments were decreasing, the growth in the field of instructional design (ID) was significantly increased with many positions remaining vacant due to a need for employees with ID skills. The LDT program faculty wanted to increase student enrollments by providing opportunities for students to attend from different geographical locations. Therefore, they started an online graduate program in LDT.

The new online masters-level program quickly emerged as one of the United States' top instructional design graduate programs. The program was marketed well and students enrolled in the program from across the world with a new cohort of students starting each semester. Program growth occurred rapidly as program enrollments escalated in the first year and continued to grow. They started with 15 students in the first cohort, 38 students in the second cohort, and by the third semester of the new program, 45 students planned to start with a total enrollment of the online program was nearly 100 students. Further, program advisors who assisted with recruiting students forecasted approximately 45 students would start each of the semesters in the second year. Because of the rapid growth, the program faculty struggled with meeting instructional staffing needs at each of the six faculty members already taught several face-to-face and online courses each semester.

INITIAL PLAN

To increase student enrollments, the LDT program faculty started an online master's program in LDT. The faculty decided to use the instructional content included in many of the face-to-face courses for the online versions of those courses and also create additional courses for the new online program. The faculty would be able to choose which courses they wanted to create, lead, and teach. The faculty also decided the online program would run year-round, using a cohort model, offering two 8-week sessions each semester, with students completing the entire program

Improving Performance, Self-Efficacy, and Motivation

in five semesters. The faculty believed the condensed format of the courses and the length of the program would be attractive to potential students. Offering courses throughout the year would also provide opportunities for the faculty to teach online courses during the academic year semesters, as well as during the summer when finding teaching opportunities can be challenging. The new program had many needs and required a lot of hands-on administration. To manage the new online program, including program scheduling, student needs, and hiring instructors, the LDT faculty decided to hire a program coordinator that would work as an administrator for the program.

Suzy Whitman, an experienced instructional designer and higher education program manager, was hired to coordinate the online program and to teach some of the program courses. Suzy started her new position at Spector University wondering what the job would entail. It was her first job as a full-time professor as she had recently earned her doctorate. Suzy had been working as a program manager for an education program at another university and she had experience with managing programs and teaching online courses. She had found the position advertised on an online job website and she thought it was perfect as she would be able to teach in a graduate program that focused on her area of interest, instructional design, and she would be able to use her management experience.

Suzy was excited at the prospect of holding a position that would allow her to use some of her knowledge and skills. Although Suzy had experience managing programs and working with faculty and staff at a university level, this would be her first experience managing the needs of a graduate program.

Suzy arrived at the Spector University campus and met with Sharon Johnson, the program chair for the various LDT graduate programs at Spector. Sharon provided Suzy some of the background of the program and then told her that it would be her responsibility to identify and implement solutions to the rapidly growing program's needs. Sharon told Suzy, "Our program is growing quickly and one of the issues we have realized is that we simply do not have enough faculty to teach all of the courses. We are hoping you can identify some solutions to our staffing needs." Suzy listened and took notes. Suzy asked some questions, such as, "How many courses are offered each semester?", "Are current full-time faculty teaching for the program?", "How have you identified who is teaching the courses now?", and "Can full-time faculty teach more sections of the courses?"

After some discussion with Sharon, Suzy offered the solution of hiring more adjunct instructors. Sharon agreed, hiring more instructors was important, but she told Suzy, "We would prefer to know the people we hire, perhaps hire our own graduates, but ultimately we understand that we really need to get some strong instructors." Suzy then asked, "Have you tried to reach out to some of your graduates that are teaching

now?” Sharon stated, “Yes, and we have found two that are able to teach for our online program, but we need more.” Suzy then asked, “About how many graduates do you expect to graduate from your doctoral program in the next year?” Sharon responded, “Perhaps about 2 or 3 a year.” Sharon then noted, “Another concern we have is we really want to ensure that our courses are taught by experienced instructional design professionals that can provide a practitioner’s perspective.” Suzy then asked, “Do most of your graduates have professional experience as IDs?” Sharon replied, “It varies depending on what they did prior to attending our doctoral program and what they have been doing since they graduated”.

Suzy’s response was to hire more instructors to teach the courses, focusing on applicants with professional ID experience. She hoped to create a pool of adjunct instructors they could hire from based on the program’s needs and the instructor’s teaching interests. This would require that she identify the knowledge, skills, and experiences needed to quickly draft and post a job announcement and to interview and hire new instructors. Sharon liked the plan and all of the full-time faculty were happy to have Suzy assist with the staffing need. Suzy was excited to implement her solution and began to work on it right away.

CASE DESCRIPTION

To address the program’s needs, Suzy immediately set forth to hire additional instructors. Suzy obtained a list of previous graduates from the LDT faculty and she worked with the college marketing department and business office to draft a call for instructors in the *Chronicle of Higher Education* and through other outlets like the American Educational Research Association. Then Suzy determined the best method to review the applications and then interview the applicants for the adjunct instructor positions. After posting the advertisements, applications quickly poured in. Within a few short weeks, Suzy had many applications from interested instructors with varying levels of teaching and ID experience.

Suzy worked with a support staff member to complete an initial review of the applications and remove unqualified applicants. In total, there were 72 qualified applicants and their applications needed to be reviewed further for potential interviews. Suzy found after her review of the applications, 53 interviews were needed. Suzy and another faculty member completed the interviews. During the review of the applications and while completing the interviews, Suzy found that many of the applicants had backgrounds as practitioners in the field, some had teaching experience in traditional classrooms and some had taught online courses.

Improving Performance, Self-Efficacy, and Motivation

Most had not taught online, and few had taught in an accelerated online course format. After the interviews were completed, 45 instructors were hired as potential instructors for the program.

As program enrollments continued to escalate, many of the 45 new instructors were needed in the courses right away. New courses started every eight weeks, with two eight-week sessions each semester for a total of six sessions each three-semester year. To meet the growing program needs, the new instructors needed to be hired and assigned to courses quickly. Suzy determined the instructor's areas of interest, experiences, and skills, from their resumes and interviews. Then she discussed the program's courses with the adjunct instructors. When she found an alignment between the adjunct instructors' interests and the program's courses, Suzy hired the instructors.

Once hired to teach a course, the new instructors received copies of the university's and college's policies from the program coordinator and some information about the course they were assigned to teach from the course lead instructor. Course lead instructors are full-time professors in the LDT program that built and then updated program courses. The new instructors also attended a short orientation session with the program ID. The orientation session included information about accessing their course and the universities' various instructional technologies.

CHALLENGES

For the first course session, new instructors were hired, 10 new instructors started teaching courses for the program. The next course session, an additional five new instructors started. Each following session, 3-5 new instructors started teaching for the program.

There were many new instructors and many needs. The new instructors asked their course leads many questions and they required a lot of support. The course lead instructors passed most of the questions and support needs to Suzy. Suzy struggled with assisting the new instructors with understanding program policies and procedures and locating resources.

The new adjunct hires had many questions and they emailed various people at the college for help, in addition to the lead instructors and Suzy, they also emailed the business office staff and the program secretary. Sometimes the adjunct instructors copied many individuals when they needed support. The adjunct instructors had many questions ranging from the paperwork during the hiring process, to technology training, the content of the courses they would be teaching, to ordering textbooks.

Once the instructors were added to their courses and each term began, questions continued including inquiries about technology support, student concerns, and course materials.

The program staff, including the secretaries, business office workers, instructional support workers, and the full-time faculty were frustrated with the confusion and level of support the new hires needed. The new adjunct instructors were unsure who to go to and where they could receive support for their various needs. With new adjunct instructors hired and then added to the courses every eight-weeks, the confusion and frustration grew.

Teaching related issues also became apparent and Sharon and the other full-time faculty were frustrated that some adjuncts were not performing as expected. Even with all of the various ways Suzy was trying to meet the instructor's needs, there were performance issues. For example, some instructors were not responding to emails from their lead instructors and some instructors went missing from courses for periods or they were not providing effective instruction in their courses. When an adjunct did not perform well in the classroom, it could cause many problems. Therefore, the course leads had to investigate issues and address adjuncts when there were problems. In extreme cases, lead instructors needed to take over courses. Many times Suzy found the adjuncts instructors were unaware of different teaching expectations for different courses. Suzy was trying to assist the new instructors that had little experience to be confident and effective teachers; however, she could not meet every need. As a result of the various problems, Suzy spent most of her day answering emails and putting out fires.

GAP ANALYSIS

In an effort to improve instructor performance, Suzy completed a gap analysis. By completing the analysis, Suzy, hoped to identify 1.) the adjunct instructor's current knowledge, skills, and practices based on the data she would review from various sources so she could identify where the gap was between their current state the desired state of practice, 2.) full-time faculty and student concerns and identify the gap between what was occurring and what was needed. To perform the analysis, Suzy decided to review the documented concerns from the full-time faculty and program staff, conduct interviews with the adjunct instructors, current students, and recent program graduates, and review the adjunct instructors' course evaluations.

Adjunct Instructor Interviews

Suzy spoke with the new adjunct hires and found that many of the new hires lacked both knowledge and experience, as well as confidence when they were teaching. Others were unclear about the policies or procedures. She created a list of questions and began to interview the adjunct instructors to better understand the issues. Many of the instructors had not taught fully online courses before and they were unsure of who were the correct people in a college to approach with their questions. They were also unsure of their teaching options and they were insecure about asking the lead instructors, the instructional designer, or the program administrator for assistance. This led to problems with the implementation of best practices in teaching, such as consistent presence in courses and accurate and effective grading. Many of the adjunct instructors lacked self-efficacy in their teaching abilities and therefore, they were unmotivated to try new instructional practices, interact with their students in the course discussions, or provide negative feedback on their student's assignments to encourage better performance.

Full-Time Faculty

Suzy documented full-time faculty concerns from several sources, emails she received, discussions during faculty meetings, and scheduling sessions to meet with individual full-time faculty. She discovered from the emails, meetings, and sessions that there were very different opinions on who and how the new instructors should be supported, and what adjunct performance should be when teaching different courses.

Some faculty felt that the adjunct instructors should receive all of their training and support from the program administrator, while others felt that it was a shared responsibility between the program administrator and the full-time faculty who serve as the leads of the courses. As some faculty thought the program administrator would be providing all of the adjunct support and training, they had provided little training or support when the adjunct was teaching their courses, while other full-time faculty mentored their adjuncts providing quick responses to questions and very resources to assist their instructors in their teaching success.

Suzy also found that some full-time faculty expected the adjunct instructors to be present in their courses nearly every day and grade assignments immediately, while others only expected the adjuncts to be present a few days a week and to grade assignments and be responsive to student questions within a specific timeframe.

The differences in expectations led Suzy to ask whether these expectations were documented and were clearly communicated to the adjunct instructors. Suzy found from the responses she received that there was inconsistency in the documentation and communication of course teaching expectations. Ultimately, some faculty that were not providing the needed guidance and structure the adjunct instructors needed.

Student Evaluations and Interviews

Next, Suzy reviewed the adjunct instructors' course evaluations, documenting things that the students liked and things they felt needed to be improved. Although some items the students wanted improved were beyond the adjunct instructors' control, there was a lot of feedback on the adjunct instructors.

Suzy also interviewed several current students and recent graduates about their experiences in their courses. She found that many of the students enjoyed their courses and instructors. However, when Suzy reviewed the students' comments about the adjunct instructors, they did have some concerns. Between the students' course evaluations and the interviews, Suzy began to see some themes appear.

Students noted that adjunct instructors:

- Were unsure how to use technologies they were tasked with using to teach the courses or students were required to use in the courses
- Often only provided positive “cheerleading” comments in the online discussions and students wanted them to provide more in-depth responses and feedback
- Often not present in the courses, sometimes they were absent for over a week

Students explained that they wanted more:

- Interaction with the instructors in the discussion forums
- Feedback on their assignments

Results of GAP Analysis

After documenting and analyzing the concerns from the staff and full-time faculty, the adjunct instructors, and the students, Suzy found that several solutions were needed. First, a process was needed to train and support the new adjunct instructors. Suzy knew she needed to figure out how to create the training and support process to address the adjunct instructor's general questions and information needs. Second, there needed to be a change in mindset regarding supporting the needs of the adjunct

Improving Performance, Self-Efficacy, and Motivation

instructors to a commitment of all full-time faculty to engage and support their adjuncts teaching the courses so the adjunct instructors and the program students could be successful. Third, as many of the adjunct instructors lacked experiences that would help them to succeed in the accelerated teaching format of the graduate program, a mentoring program was needed. The mentoring program would go beyond the assistance the program administrator provided to create an opportunity for authentic opportunities for new adjunct instructors lacking the experience to gain that experience while working with an experienced instructor teaching in the program.

In an effort to improve instructor performance, Suzy completed the analysis and determined the best potential solutions were,

1. Developing centralized program training for the adjunct instructors, while collaborating with and informing the full-time faculty and staff to create support and buy-in,
2. Offering course-specific support and training from lead instructors, and
3. Developing a mentoring program for new or inexperienced adjunct instructors.

Therefore, a new adjunct instructor orientation training and mentoring program were planned and full-time faculty were asked to individually create some support items and resources for adjunct instructors who would teach their courses.

Suzy's main concerns were to develop a training program that was timely, clear, and supportive of the adjunct instructors and the program. After reviewing the various issues, Suzy also determined the best potential solution was determined to be both structured instruction from the program and the full-time faculty and authentic learning opportunities for those that needed it. These two approaches were chosen as they would provide new instructors with information and opportunities to increase instructor comprehension and transfer to ultimately gain better performance and confidence in the classroom.

TRAINING AND PERFORMANCE

Creating the Training Instruction

Suzy met with the instructional design support team to determine the best ways to train the instructors. Through reviewing the various issues that were occurring, and documenting the concerns of the full-time faculty and staff, and problems within the courses, Suzy and the design support team determined that to improve the adjunct instructors' performance, the program needed to provide them with training and

consistent support. Based on the analysis, they determined they had a variety of things they needed to provide to the adjunct instructors including:

- General college and graduate program-specific policies and procedures
- Who they could go to for which needs and services
- Where they could find self-help resources
- Teaching and Technology training and support
- Program teaching expectations
- Class specific policies and teaching expectations
- Mentoring and opportunities to learn

Training and Support

Orientation Training

After meeting with the ID team and then the program full-time faculty, Suzy was able to create a list of items that need to be included in the orientation training. Suzy and the team had reviewed the concerns and requests of the full-time faculty, staff, adjunct instructors and students and the issues Suzy had found when evaluating the problems that were occurring. The orientation training would be provided to all adjunct instructors four weeks prior to their start date of teaching for the LDT program. The program's instructional designer and Suzy would provide the training to assist with adjunct instructor questions and encourage instructors to reach out for assistance when needed. Having the training a month before their start date provided the adjunct instructors with an opportunity to ask questions during the training and follow-up to receive additional support after the training. During the training, the instructional designer and Suzy presented scenarios based on actual course situations and had the new adjunct instructors respond to questions presented. Adjuncts were provided with various cases and given the opportunity to critically think through the problems to prepare them for teaching.

Resource Website

To provide the adjunct instructors with a location where they could access the materials used in the orientation training, as well as resources they may need while teaching for the program, a resource website was created that included many of the resources adjunct faculty commonly needed including links to technology resources, information about program staff and faculty, various forms (i.e. - student incomplete forms)

Course Specific Training

To provide instructors with information about a specific course they were hired to teach, full-time faculty, who served as lead instructors, were asked to provide the adjunct instructors with training and support. The training support would be a requirement of all full-time faculty and they could provide this through course live or recorded course information sessions to introduce instructors to their courses, resources such as course teaching job-aids, and other methods of supporting instructors when teaching their courses. Job-aids were required to use a template format so instructors were provided with a consistent format of important information they were required to know when teaching the course.

Mentoring - Authentic Learning Opportunities

As many of the newly hired adjunct faculty had little experience teaching online, teaching in an accelerated learning environment, or they had not taught some instructional content prior to their being hired to the adjunct pool, Suzy started a mentoring program to provide the new instructors with an authentic learning opportunity to develop their knowledge and skills for teaching in the accelerated online program. The mentoring program paired less experienced instructors with full-time instructors or other experienced adjunct faculty. Once paired, they would co-teach an online course. The mentoring program enabled the new adjuncts to learn alongside a peer instructor in a live class while developing their skills. The mentees were expected to engage with the course content and the students and while improving their teaching knowledge and skills, with the intention that the new instructors would be teaching their own courses after a semester or two of mentorship and they would remain as a regular adjunct instructor for the program.

Results of Training and Support Initiatives

The orientation training session, resource website, course-specific training, and mentoring program were developed and put into place. The training was provided four weeks prior to the course start and hiring date for the instructors. Remaining questions and issues were resolved in the weeks prior to and just after course start dates. The adjunct instructors sent their follow-up questions to designated people based on their training, reducing the multiple emails received across the program.

The changes in the program were dramatic. The new training and support initiatives addressed many of the issues. The instructors' performance improved dramatically. The communications went to correct individuals. Full-time faculty, staff and student complaints went down dramatically. Adjunct instructor course evaluation scores increased. Full-time faculty began to discuss the creative and innovative teaching strategies their adjunct instructors were using in their courses. The mentoring program was a tremendous success with new instructors completing the program and performing with excellence in their courses.

The mentoring program became a requirement for most instructors hired to teach in the LDT program. It provided new instructors, even those who were experienced instructors, with an opportunity to see how instructors taught in the LDT program. As the online program offered fully online-accelerated course, many of the new instructors had not experienced this format previously and struggled. By having another instructor working alongside, there was an opportunity to learn while performing all of the duties of an independent instructor.

In general, there was success across the board in bringing the adjunct instructor's performance to the level that was needed. There were still some lingering and occasional issues, such as a new adjunct emailing incorrect individuals for assistance. In these cases, the full-time faculty, staff, and Suzy worked together with the instructor and provided support, such as informing the adjunct of the correct individuals to receive assistance for future knowledge.

SOLUTIONS AND RECOMMENDATIONS

Evaluating need, making decisions and implementing modifications, as well as the potential impact of modifications, are all important steps. However, collecting and analyzing information at each step is key to success.

In this case study, the program administrator needed to identify the problem(s), determine a solution and then implement that solution. Although Suzy did analyze the situation in her discussion with Sharon, and Suzy did determine a solution for one of the program's needs, her diagnosis was incomplete as she did not understand all of the issues and she needed to develop the solution further (Stolovitch & Keeps, 2004). When problem-solving, completing a problem analysis is an important step and sometimes a needs analysis is needed after the problems are determined. A problem analysis can assist in fully understanding all of the problems and ensuring that the focus will be on solving the right problems (Spradlin, 2012; Wedell-Wedellsborg, 2017). Once the problems are identified, a needs analysis, which is a systematic method of considering the problems and determining the needs and potential solutions,

Improving Performance, Self-Efficacy, and Motivation

could have help Suzy understand the full scope of the issues prior to determining a solution. Skipping a problem analysis and needs analysis are often costly mistakes.

The resulting effect of hiring new adjunct instructors without effective training and also hiring instructors with little online teaching experience was confusion and frustration. Hiring the new instructors helped to solve one issue as it provided the needed staffing, but created other issues, as the new instructors were not experienced or adequately trained. In cases such as this, a thorough problem analysis and needs assessment would be the best practice Suzy should follow. The depth of the needs assessment would depend on the situation, but as a program coordinator, Suzy should have a full grasp the problem and the need prior to starting her solution.

As a result, the program coordinator needed to identify the new problems, determine potential training solutions, design and develop the training to provide opportunities for structured and authentic learning experiences, test those solutions and reevaluate for modifications to improve instructor performance and student education.

By creating training solutions that went beyond providing the instructors with knowledge of the program's expectations to developing their teaching skills, Suzy had created opportunities for the new instructors to learn through structured and authentic learning experiences.

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KEY TERMS AND DEFINITIONS

Adjunct Instructor: Is a professor who teaches on a limited-term contract, often for one semester at a time, in a higher education setting.

Gap Analysis: Is a standardized process of determining the gap-in-knowledge. The analysis occurs by identifying the difference between the current knowledge, skills, and practices and the desired practice.

Instructional Design: Is the systematic process of developing instruction using learning and instructional theories. The instructional design includes the process of analyzing the learning needs and goals and then develop a method to deliver instruction to meet those needs and goals.

Job-Aid: A tool or resource that provides information and guidance to help the user avoid mistakes.

Lead Instructor: A full-time faculty member in charge of a course. Lead instructors develop and update the course, ensuring the course content remains relevant. Lead instructors also provide assistance to instructors teaching the course.

APPENDIX: QUESTIONS FOR DISCUSSION

1. Are there any other questions Suzy should have asked Sharon or others, prior to starting her plan to hire new instructors?
2. What could Suzy have done differently during the initial interviews when hiring the adjunct instructors that may have helped her identify instructor strengths and weaknesses?
3. What other things could Suzy have done to have avoided some of the issues that presented themselves in this case?

Chapter 7

Training as the Beginning of a Deeper Conversation: Challenging How It Is Offered and What It Includes

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EXECUTIVE SUMMARY

A substantial renovation to a historic college and building resulted in a state-of-the-art building, full of new technologies and possibilities for new kinds of technology-enhanced teaching. Technology malfunctions slowed adoption and exploration of these possibilities, but limited communication and training accompanied by institutionally-mandated scheduling system stagnated adoption and innovation further. This case explores these issues and how an unconventional training series has started a deeper conversation about these issues and promoted more pedagogical experimentation.

DOI: 10.4018/978-1-7998-0054-5.ch007

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ORGANIZATION BACKGROUND

Ohio University, founded in 1804, was the first university in the Northwest Territory and the new state of Ohio. Today, Ohio University has over 36,000 students across its six campuses and two satellite centers. The Normal Department, the precursor to the Patton College of Education (PCOE), was established in 1886 and was the first state-supported teacher education program in Ohio. Prior to the department's formal establishment, teacher education courses appeared as far back as 1831. Beyond being the first of its kind in Ohio, the PCOE remains one of the largest producers of K-12 teachers in the state as well as being responsible for producing a larger number of other types of educators and human services providers. The PCOE is the setting for the case discussed in this chapter. Starting in May 2015, the PCOE was moved out of its home in McCracken Hall, as a \$32.8 million renovation was completed over the next 19 months. The renovation included the adding of over 34,000 square feet to the building through the addition of a new wing and a functional fourth floor (replacing previously unused attic space). As part of the renovations, every classroom, seminar room, and conference room gained some combination of projectors, moveable projection screens, large screen display panels, wireless presentation systems to connect to the different displays and projectors, and enhanced instructor stations to navigate the different features. Every room was also outfitted with chairs and tables with wheels to promote active learning pedagogies and flexible classroom setups. Some of the tables also had the capability of being combined together through locking mechanisms and also had a power pass-through capabilities.

SETTING THE STAGE

Having arrived at Ohio University during the renovation, the author has no firsthand knowledge of McCracken Hall prior to the renovation. The author joined the faculty of the PCOE as a new faculty member in the Instructional Technology program housed within the Educational Studies department. In addition to being a faculty member, the author was also appointed to chair a technology outreach group on behalf of the dean and chair the technology sub-committee of the larger PCOE assessment council. Colleagues and students have shared stories of an old building that was well worn. Limited classroom space resulted in a number of classes being taught in other buildings, heating and cooling inconsistencies could be found in different parts of the building, and classroom technologies were not present in all instructional spaces. At the conclusion of the renovation, McCracken Hall became

Training as the Beginning of a Deeper Conversation

the most modern building on campus, one of the most environmentally friendly (Ohio University's first building to earn Leadership in Energy and Environmental Design Gold certification), and one of the most technologically advanced. Part of these advancements came from examining room and layout experiments in other recently renovated buildings on campus as guiding examples.

Multiple committees were formed during the course of the renovation to make recommendations on how it would proceed. The committee driving technology decisions included members of the Curriculum Technology Center (i.e. Local technology services and instructional support in the building) and Instructional Technology faculty members. An additional Instructional Technology faculty member drove technology planning for one experimental technology lab in the building but started a new job in another university midway through the renovation. Recommendations from the committee and faculty members were considered and then taken to vendors that weighed in on the final design decisions before implementing them.

CASE DESCRIPTION

This case describes a variety of issues that occurred during or resulted from the renovation of McCracken Hall. These include the need for professional development and the need for both more and sustained conversations about technology and functionality. As with many interventions, training could help to address a portion of the needs, but there were other factors at play, which also needed to be addressed. It was these considerations that shaped the type of training that was designed, developed, and carried out.

Process Summary

The author's understanding of this case developed from several different explorations carried out over the course of two years. As the chair of the technology assessment sub-committee, the author regularly spoke with faculty and staff across the PCOE to find out about technology use, needs, and what resources were available. These discussions and explorations of what technologies and resources were available in the new building were important to develop as much knowledge as possible due to the Council for the Accreditation of Educator Preparation's ([CAEP], 2018) technology standards being known as a crosscutting theme. This means that any School or College of Education that prepares future educators needs to be able to

demonstrate that technology is integrated throughout the curriculum and programs. While these accreditation requirements kept the author looking inward at the PCOE through continual cycles of needs assessment, the author was also looking at the capacity to provide outreach via technology. As the chair of dean's technology outreach committee, the author was tasked with identifying technology needs of schools and educators in the community and larger region, as well as how the PCOE could then address those needs. This resulted in parallel cycles of needs assessments being conducted and examinations of capacity to address identified needs.

Findings from the needs analysis cycles and capacity explorations were discussed at different intervals with administrators, faculty, and staff as a way to triangulate findings and also serve as opportunities for peer debriefing with colleagues who had been outside of the analysis cycles. These discussions would lead to additional discussions with different stakeholders each time the author would learn something new from one of the stakeholders. The remainder of this case discusses the findings from these cycles of needs analysis and continued interactions with faculty and staff. The findings emphasized are the ones related to accreditation-related inquiries because of their greater day to day impacts and the regular building up which takes place as a part of the preparation for impending CAEP accreditation report submission and visits.

Technology Concerns

Based on the cycles of needs assessment and capacity exploration, three main technology concerns emerged as part of this case: limited technology to train with, malfunctioning wireless technology, and instructional spaces lack components for complete functionality.

Limited Technology

One concern going into the new building is something the author would refer to as limited training on the new technology with non-equivalent approximations. While this item could equally be placed in the Management and Organizational Concerns section, it seems to weigh the most heavily toward being mainly a technology concern. By not being in the building where the renovations were taking place and not being able to see how each learning environment would be set up, approximations were used instead. Faculty and staff were given access to a single instructor station similar to what would be used in the newly renovated classrooms. Also available were a projector and a display panel. These were housed in a small room designated as a

Training as the Beginning of a Deeper Conversation

trial/training space in the temporary building the PCOE was housed in during the renovation. One of the technologies included with this demonstration space was Air Media, which is discussed in greater detail below, but was already inconsistent in this early testing space. This was the only training offered prior to moving back to the newly renovated building, though faculty and staff were welcomed to visit the space as their schedules would allow outside of designated visit times for each department. These visits had no specific training associated with them, though a graduate assistant working with the local technology services was available to turn everything on in the testing room.

Malfunctioning Wireless Technology

The next concern had to do with wireless connectivity. With a heavy investment in projection systems and many display panels mounted in different classrooms, seminar rooms, and conference rooms, there was a need to facilitate connecting to them as easily as possible. While instructor stations had a variety of connection cable options for direct physical connections, other options were necessary for projecting to the different screens around the rooms and allowing different individuals or groups (e.g. small workgroups) in each setting to be able to project. To facilitate this it was decided to use Air Media, a wireless presentation solution that includes both a hardware component as well as a software component that could be installed on laptops and other mobile devices. In principle, the use of Air Media would allow faculty, staff, and students to connect to the panel displays to which they were closest to in the room. This system had been successfully deployed and used in many other buildings on campus, but the installation in McCracken Hall would often find those trying to connect be either unsuccessful or to be disconnected within a random amount of time. The author's worst experience with this was being disconnected approximately 20 times within 35 minutes before no longer using Air Media during the meeting he was running. Early upgrades to the system allowed connections from farther points across rooms (i.e. being able to connect to panels more than a few feet away from where they were sitting) and longer connection times. With the consistent issues with Air Media, fewer and fewer faculty, staff, and students tried to connect anymore.

Instructional Spaces Lack Components for Complete Functionality

The last concern had to do with distance learning rooms. Several rooms were developed to have distance learning and teleconferencing specialty functions. Each of these rooms has microphones suspended from the ceilings and multiple cameras placed around the room to provide long shots of the spaces as well as to follow presenters or presumably whoever may be speaking at a given time. The cameras did not appear to function, or at least did not seem to move as some of them should. Over time recording functionality was added to some of these rooms in the form of a new control panel which appeared near the existing control terminals, but with the cameras not appearing to function and it not being clear where recordings were being stored, these functions were generally ignored and eventually completely overlooked by those teaching in those rooms. In place of this functionality, guest speakers and remote attendees were connected via webcams and laptops. While many of these ad hoc solutions worked, some found themselves experiencing audio feedback loops as room microphones would sometimes be working or other times emit loud clicking sounds at random intervals, like someone picking up or putting down or an old fashioned phone receiver or connecting a cable to a live amplifier or speaker. As part of the walking tours described later in this case, and participants asking questions, we learned that video bridge equipment would be necessary to facilitate the distance education functionality, such as the cameras moving and proper video capture being possible.

Management and Organizational Concerns

As with the Technology Concerns sections listed above, the Management and Organizational Concerns were also developed based on the cycles of needs assessment and capacity examination. Two main management and organizational concerns emerged as part of this case: faculty and staff perceptions of technology and training and how rooms are scheduled for classes.

Faculty and Staff Perceptions of Technology and Training

As noted earlier, in addition to being a faculty member in the Instructional Technology program, one of the author's roles in the PCOE is that of chairing the Assessment Council's Technology Assessment Sub-Committee. This translates to being responsible for having both an understanding of how programs accredited by CAEP are integrating technology throughout the curriculum, as well as identifying

Training as the Beginning of a Deeper Conversation

ways in which to help programs better integrate technology. Through a variety of meetings and individual conversations, the differing perceptions became clearer. The first perception by a portion of the faculty was that there wasn't sufficient technology in the old building to use or be trained on and offered training was limited, thus little had been done and there was little to talk about. The second perception by another portion of the faculty and technology support staff that there were sufficient technology and training options, but training sessions in the past were poorly attended. Faculty and staff members were also limited in responding to the local technology services surveys about desired training. These perceptions and limited participation were not addressed for some time because everyone was becoming acclimated into the new building. By starting back in the newly renovated McCracken Hall in the spring 2017 semester, much of that initial time back was spent unpacking and getting through the remainder of the academic year. The 2017-18 academic year presented an opportunity to address these perceptions, but where faculty would be teaching also created a challenge for planning.

One of the largest organizational concerns has to do with the logistical element of scheduling rooms for classes in McCracken Hall. Technically speaking, this is actually a concern across the entire university based on how scheduling is completed, but this case focuses solely on the PCOE's portion of this concern. The pattern is such that each department submits a list of classes for each semester with the meeting day and time, name of instructor, and the enrollment capacity cap. These submissions are treated on a first come, first serve basis. This system favors departments that plan out their classes well in advance or have a reliable rotation of courses which do not change. In some instances, individual units within departments can submit their courses prior to the rest of the department having been submitted. The scheduling system then compares individual class needs, student capacity caps versus room capacity, class time, and day of the week meeting time. Working from the order in which the departments submitted their information, the system arbitrarily assigns rooms as long as there are rooms available in the building which meet the criteria, but once rooms are no longer available the system then moves to other available locations on campus.

While this scheduling system is efficient in automating a task that could otherwise take a considerable amount of work time by individuals, it completely removes human choice and needs from the equation. Because of the wheeled furniture upgrades noted earlier, many of the classrooms in McCracken Hall have the capacity of being active learning classrooms, but some are specifically designed to facilitate having multiple technology-enhanced group spaces throughout the room. The problem is those faculty members who wish to make use of such spaces are subject to the proverbial luck of the draw in getting one of those rooms. While other rooms can

be modified to achieve similar functionality via moving furniture, though absent technology support such as large video panels, faculty are thwarted by another policy. This is the policy, or perhaps more accurately described as a sometimes-enforced subjective norm, of returning rooms to the layout in which they were found. When this policy/subjective norm was most readily enforced, many classrooms remained in traditional rows, meaning that employing active learning configurations with the furniture could cost a class the first 10 minutes of meeting time as well as the last 10 to return the classroom to rows. This loss of time made such active learning experimentation to be limited during the semester and sometimes put off until a semester when the luck of the draw resulted in one of the active learning classrooms being assigned.

CURRENT CHALLENGES FACING THE ORGANIZATION

The opposing perceptions of technology and training in the PCOE still remain to some degree. Some faculty have begun having more conversations with the author, other Instructional Technology faculty, and building technology services about how to better use the different classroom technologies to better support instructors in their teaching in each space. More of these instances of faculty raising concerns about which room they can teach in and sharing more needs related to the classrooms occurred during and after the training that is discussed in the solutions section.

Some of the room configuration concerns have been addressed over time. As faculty have become comfortable in the newly renovated building, some room configurations have changed. Rooms that used to be in traditional rows are now arranged in pods (i.e. two or more tables combined to accommodate small groups), allowing active learning approaches and group work to be more easily accomplished. While these spaces do not have the benefit of display panels to help facilitate these smaller groups sharing information on one larger display, they are still able to work collaboratively across their laptops and mobile devices. It is unclear if these changes are a result of the easing of the enforcement of the room layout policy/subjective norms, having “lived in” in the space long enough now to be comfortable in changing layouts, or a new subjective norm taking hold. Ironically, as this chapter was being finalized the author has attended meetings in two rooms where the group was advised to return the room to rows to avoid potential conflicts with other groups in the building.

The Air Media deployment remains a concern in many spaces in the building, though some users have experienced much greater stability with their connections. It appears that part of this increased stability has to do with users connecting via Apple devices (more stable) versus connecting via Android devices (less stable).

Training as the Beginning of a Deeper Conversation

One of the remaining oddities of this situation is that Air Media deployments work without instance in other buildings on campus and the same vendor was used for those installations as well. Even with these improvements, many display panels have a video cable hanging down from them for connecting laptops, despite building technology services trying to limit such practices.

As of this writing, the bridge equipment to facilitate the distance learning/telecommunication rooms has not been installed. The last status update for this improvement was that there is a dispute with one of the vendors as to whose financial responsibility it was to replace some of the cabling involved. It appears that some of the wirings may not have been done correctly during the renovation, but the installation warranty review time limit has expired. It is unclear when this will be resolved, but what is already an expensive upgrade is potentially going to cost more.

SOLUTIONS AND RECOMMENDATIONS

Getting Started

In noting the concerns addressed in the sections above and the need to help faculty and staff to make better use of the new technology and new pedagogical opportunities provided as a result of the renovation, the author and a colleague suggested the potential to have semi-regular training sessions throughout the academic year. The idea behind semi-regular meetings was twofold, to promote the development of a community of practice to better support the continued transition into the renovated space and start discussing the concerns which had emerged since the renovation. While such an approach was not discouraged, we were instead encouraged to do a week-long professional development series in the summer, which had become the established format for extended training efforts. While we didn't feel this format was ideal, we did see it as an opportunity to challenge what regular training sessions of this nature could be in both format and content. A year and a half after returning to our renovated building, the week-long training session would commence.

Thinking Going into the Training

Even though we had not specifically targeted innovators or early adopters (Rogers, 2010) for the training series, we knew that some attendees were and that others could take on these roles after the training. We didn't want participants to be passive during the week, because we know adult learners can learn best when they are a part of determining the instruction and helping to develop experiences (Hord, 2009; Sparks,

2009). While teaching can often be a private act (Dufour, 1991), it is important to share our teaching practices as a community property so that they too can be part of the scholarly discussion (Shulman, 2000). With this in mind, we told our attendees that we wanted to them to share as much about their practices and experiences as they were comfortable with because those stories were important to them and we wanted to learn as much from them as they did from us (Tate, 2012). Such sharing can also lead to collaborative solutions to problems and concerns, and “andragogy tells us that adults learn best when engaged collaboratively with their peers” (Tate, 2012, p. 6). Ideally, training should be followed up with some form of ongoing support. It has been recommended that practices such as peer coaching (e.g. Joyce & Calhoun, 2010; 2018) or study groups (e.g. Gersten, Dimino, Jayanthi, Kim, & Santoro, 2010) can be help support changes in practice.

Challenging the Norms for Summer Training

Summer training offerings traditionally consisted of 9AM-5PM sustained daily meetings with a break for lunch. We carried out our training as 10AM-12: 30 PM, breaking for lunch (inviting attendees to eat with us), and resuming from 1:30-3: 30 PM. Our rationale was that while we were meeting two and half hours less per day than usual, we were making our meeting times more concentrated in content and discussion, and having the lunch break be a time when we could promote further discussion. Traditionally, summer training focused on one pre-determined topic and covered it in depth. While we had a focus on technology integration as a whole, we wanted to meet the unique needs of attendees and attempted to do so by sharing a list of potential topics we could cover. We also welcomed suggestions for other topics that could be presented. This early discussion allowed the whole training series to be built almost entirely on an attendee-centered approach (cf. Hord, 2009; Sparks, 2009).

Early on my colleague and I decided that we wanted each session to be more conversation than presentation (cf. Tate, 2012) and more active than static. Perhaps the biggest deviation from traditional training was our walking tour of McCracken Hall. Our participants seemed surprised at how quickly they were up and moving around each day. Kinesthetic learners tend to be the most neglected types of learners in professional development sessions, but learning with movement helps transfer learned concepts to procedural memory (Tate, 2012). The walking tour saw us visit two to five types of room each day, spend time in each room, ask for volunteers to talk through their teaching experiences in them, talk about how such spaces could be used in future teaching, and then seeing how well the technology worked in each room to support the types of teaching that had been discussed. We also made points

Training as the Beginning of a Deeper Conversation

of highlighting services available in the building that attendees may also not know about, such as building technology services' checking out of equipment to faculty, staff, and students and their offerings of specialized resources such as a laminator and an educational book collection.

Thinking About Each Space and Knowing What is Possible

In the different spaces, we took turns showing and telling (cf. Shulman, 2000). If none of the attendees had taught or met in a visited space, the presenters would explain the basics of the space, point out the unique qualities of each space, and then let the attendees experiment. If attendees had taught in any of the spaces, we had them share their teaching experiences and encouraged the sharing of struggles, successes, and the thought processes used while working and adapting in the space. Some space visits resulted in the discovery of systems not working, not working the way they thought they should, or the confirmation that some systems were still not working. Despite some rooms having been updated to fix systems like Air Media, attendees were still regularly disconnected, even if their connection did last longer. Other rooms, such as those to support distance learning and teleconferencing were found to still need network bridging equipment to have their full functionality available. As different attendees would discover these items, more would discuss them and indicate that they would become action items at their next college-level committee meetings or regular discussion points in their future department meetings. One of the most often repeated comments was how each attendee was going to push for their department to start doing similar walking tours at the start of each school year, especially with new hires, to make sure they knew what was available and what worked.

In addition to these important discussions and calls to action, there were also important changes taking place. Attendees felt more confident in themselves as they began to realize that their inability to get certain things to work had not been a lack of skill or effort, but concerns with interfaces and functionality. Each day the group found something new, more questions were asked, building technology services were being asked to join discussions, and more equipment was being ordered. By seeing all of the spaces in the college, and more importantly, better understanding the spaces, attendees were excited about the new kinds of teaching they could try out in each space and the different kinds of equipment they could use to support these efforts and innovative behaviors (cf. Rogers, 2010). While the scheduling system still won't allow such interest or pedagogic intention to weight the room assignments, there are more conversations being had about how and why rooms are assigned to different classes.

After the Training Ended – Initial Impacts

When the training concluded there was no product development to point to and the system hadn't changed, but each person left excited to try something new in their teaching and push for more changes such as room assignments. We had discussed the possibility of checking back in with the attendees at different intervals, such as to provide peer coaching (Joyce & Calhoun, 2010; 2018) or to organize study groups (Gersten et al., 2010), but most of them kept checking back in with us regularly to note how their new teaching experiments had been going. Attendees were also clearly taking to colleagues as we would hear about how many more people had been discussing the context of the training and what they were going to try to start doing with the technology in each room. In larger faculty meetings, our training series is held up as valuable and meaningful experience, which has led to new strategic plans indicating a greater need for the involvement of the Instructional Technology faculty in future technology acquisitions and facilitating training, suggesting that vendors may not have as much decision-making power in the future. The continued discussion, efforts, and policy decision influences support our belief that some attendees were indeed innovators or early adopters and others became so during the week.

After the Training Ended – What is Still Left to be Done

While we experienced a great week of discussion through the training series and we continue to hear about it generating more conversations, it also highlighted the need for more and sustained communication. It was clear to the attendees that faculty were not fully aware of the room options, technologies available, and related services offered in the building after the renovation. It was also clear that faculty weren't always communicating needs and concerns to their colleagues, department chairs, building technology support, and the dean's office. It appears that many people documented things early after we returned to McCracen Hall, such as the AirMedia deployment not working, but that then seems to have stopped. When the reports stopped, it appears that building technology services believed that whatever the last update was had finally fixed things, but instead faculty and staff members had just stopped using it and thus had no reason to still be reporting issues. It is recommended that a reporting system and record keeping system be implemented, even if it is solely a webpage which states which rooms have been updated so that faculty and staff know to try again in those spaces and report back if they are still having trouble. Training also needs to be offered on a regular basis so that it becomes a part of the culture as opposed to an all or nothing instance during the summer.

Thinking Forward

The author would encourage readers to challenge professional development and training look like in each of their own environments. While the content of the training is important, they shouldn't be too quick to dismiss how important the overall setting can be. One of the most powerful aspects of our training series was our walking tour and having every participant share their stories of each space. Even if participants have been in a work environment for a while, there is no guarantee they have a full understanding of it and what related offerings may be present. Readers should strive to have their participants talking as much as or more than they do as the trainer or session facilitator. Ideally, the trainer/facilitator will learn as much from the sessions as the participants do. Allow time for participants to digest what they are learning and discussing, as well as time to both play and try out what is being discussed. This may materialize as meeting for less time than usual each training day so that participants have time to try things out on their own before the next session. Finally, allow participants to determine how they will apply what they take away from the sessions. As part of the closing session for the week, the author and his colleague asked a basic question of what was something that each participant thought they would take away from the week and try in the upcoming semester. Because of the regular discussions and openness through the week, each attendee had a thoughtful response and a plan of action. While we could have had a predetermined outcome product necessary by the end of the week, we found that organic opportunities throughout the week were more meaningful than those artificially put in place as part of such training in other settings.

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KEY TERMS AND DEFINITIONS

Active Learning: A practice of being more student-centered in teaching and learning. This can involve the teacher/instructor taking on more of a facilitator role as opposed to the traditional role of expert and source of knowledge. Active learning can also take advantage of both chairs and furniture which have wheels on them, allowing for the rapid reconfiguration of rooms and student seating, to allow flexible and experimental forms of interaction.

Display Panels: Appearing like a large, flat panel television, the displays in this case range from 40-60 inches in size. Unlike television, these panels do not have built-in video decoders for television signals, nor do they have connections for coaxial cables.

Instructor Station and Terminal: The instructor station, in this case, refers to the desk, table, podium, or cart which contains the wired computer for a room as well as the terminal which allows a user to control the power of the projector and display panels, control which inputs are used to project for the whole room, and when it works in the distance rooms, both record meetings or lectures and control connections with students or visitors at a distance.

Kinesthetic Learning: Learning by carrying out some type of physical activity such as carrying out a procedure or acting something out. It can also sometimes be referred to as Tactile Learning. While readers may be familiar with the concept of Haptic Learning, that has to do with the only touch as opposed to kinesthetic, which involves the whole body.

Moveable Projector Screens: In the context of this case, this refers to screens which LCD projectors project onto. The movement aspect comes in the form of them being able to be retracted into the ceiling when not in use.

Vendor: A business that provides goods or services. For some organizations, some vendors may be designated as being preferred and others may be designated as being required. In the instance of preferred vendors, an organization has a favorable relationship with them and employees are encouraged to do business with them as needed. In instances where a vendor is required, purchasing or billing practices may have been negotiated by the organization or a controlling entity at the state or regional level.

Video Bridge: A device which allows multiple locations or multiple video inputs to be put together into a common video conferencing environment. This may be either a wired or wireless device.

Wireless Presentation: Through the use of a wireless connection, individuals can project the screens of their mobile devices to a display panel or projector. This concept can also sometimes be referred to as screencasting or screen sharing.

APPENDIX: QUESTIONS FOR DISCUSSION

1. In considering your own workplace, how likely are the conversations which occur in professional development sessions to lead to real change in your organization?
2. Are there some systems in place in your organization that involve too many stakeholders to be changed based on the needs identified by one group of innovators or early adopters?
3. Is movement, especially in the form of walking tours, something that could help your learners to better understand their work settings or to promote conversations regarding the use of such settings/spaces?
4. How important to your training sessions are tangible products versus tangible actions?
5. Is your work environment one where training participants are comfortable to share their stories of success and failures, ask questions, and generally be vulnerable? If not, is there a change you could make to promote such an environment?

Chapter 8

Insider Effects: Empathy in Needs Assessment Practice

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EXECUTIVE SUMMARY

Needs assessment generally refers to the identification of some need or problem to be addressed. The authors aim to demonstrate how empathy, when shaped by authentic affinity or involvement with an organization, can serve the needs assessment experience in a positive way. As part of the chapter, the authors describe their approach and highlight pertinent findings from the needs assessment, which focused on proactive opportunities to enhance outcomes in parent efficacy. The authors also detail accounts of participant experiences within the process, including their interactions with the practitioner and overall experience. Finally, the authors share practitioner reflections on the overall process.

DOI: 10.4018/978-1-7998-0054-5.ch008

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ORGANIZATION BACKGROUND

Human performance technology is the “study and ethical practice of improving productivity in organizations by designing and developing effective interventions that are results-oriented, comprehensive, and systemic” (Pershing, 2006), p. 6). While there are many salient phrases within this definition that ground the work of performance improvement consultants, “in organizations” is a key prepositional phrase because it demonstrates an awareness that performance is relative to and situated within a specific context as defined by whatever organization is the focus of inquiry. When working in this capacity, it is imperative to first understand how that organization functions. The work presented in this case was performed in collaboration with and on behalf of one organization, the Coalition for Neurodiverse Learners (pseudonym).

Organizational Mission

Currently, there are a growing number of learners with developmental delays, learning related disabilities, and/or Autism Spectrum Disorder (ASD) (Abnett, 2013; VanderPaelt, Warreyn, & Roeyers, 2014). According to the Centers for Disease Control, one in every 59 children has been diagnosed with ASD (“CDC increases the estimate of autism’s prevalence by 15 percent, to 1 in 59 children,” 2018). While the diagnoses are more frequent, the journey for parents to come to terms with the diagnosis, discover how best to care for their children, and arm themselves with the knowledge required to properly advocate for their children is a long and winding one. Luckily, there are several organizations that exist to assist parents on that journey. One such organization can be found within the Washington, D.C. metro area. Incorporated under section 501(c)(3) of the Internal Revenue Code of 1986, as amended, the Coalition for Neurodiverse Learners boasts a mission to improve the educational outcomes and experiences of students on the autism spectrum within a large county outside of the city. The non-profit both collaborates with and serves families, educators, local county public school policymakers, professional service providers, self-advocates, and students with ASD.

Organizational Services

The Coalition for Neurodiverse Learners leverages fundraising, paid memberships, and optional one-time event fees to provide a number of educational events for students with ASD, parents of students with ASD, and educators who serve students with ASD. Some of the events they offer for students include workshops to practice self-

advocacy skills, safe practices in interacting with law enforcement, and opportunities to socialize with peers. Events specifically serving parents and caretakers comprise the majority of the Coalition for Neurodiverse Learners' services. Each month, they provide speaker events covering a variety of topics, including understanding an ASD diagnosis, therapeutic service options, strategies to promote educational success, and special needs-related financial planning. They also offer workshops specific to the Individualized Education Plan (IEP) process, where educational consultants address pressing questions regarding specific student IEPs. Finally, educators are offered memberships free of charge, which provide them with access to the monthly speaker events. The Coalition for Neurodiverse Learners also provides grants for teachers in the county to either purchase curricular materials or participate in training that enables them to better serve students on the Autism spectrum.

Organizational Leadership

With the exception of its recently created Executive Director position, the Coalition for Neurodiverse Learners has no other paid staff members. The rest of the leadership board consists of parent volunteers that serve in the capacity of President, Vice President, Secretary, Treasurer, and Board Members at Large. All of the organizational leaders have at least one child on the Autism spectrum and are committed to the organization's goals. Because the organizational structure is relatively small, they depend on the additional support of parent volunteers, contributions from therapeutic professionals, and collaborations with the local public-school administration to provide services in accordance with its mission.

SETTING THE STAGE

Needs Assessment as a Performance Improvement Tool

Within the HPT framework, there are many performance improvement interventions that practitioners can access. However, it is the responsibility of the HPT practitioner to select the appropriate ones. One of the interventions within the HPT toolbox that was applied within this case is needs assessment (Langdon, Whiteside, & McKenna, 1999). More specifically, needs assessment itself can be considered technology, when considering technology refers to "a systematic and systemic approach to solve practical problems," ("What is HPT?," 2013). Within the HPT context, needs assessment is a tool for identifying gaps or deltas between current results and required results, which can then be prioritized according to the difference between the relative cost of

closing those gaps versus ignoring them or their consequences (Altschuld & Kumar, 2010; Kalman, 2016; Kaufman, 1992; Stefaniak, Baaki, Howard, & Stapelton, 2018; Swart & Kaufman, 2009). There are several models of needs assessment, whereby those operating under traditional notions specifically focus on fixing problems.

For the purpose of this case, we take a different perspective and operationally define needs assessment as *the data-driven search for opportunities to maximize individual, team, or organizational performance by contributing to the effectiveness, efficiency, and/or ease of supporting organizational goals*. This needs assessment approach is an appropriate intervention because the case, which is described in the sections that follow, aligns with these two circumstances: 1) when there is a desire to identify the extent to which current performance is successful as well as the extent to which it is not, and 2) when there is a desire to ensure the organization is adding value both internally and externally (Langdon et al., 1999). In this sense, needs assessment is a tool that can be leveraged proactively, as it was in this instance.

Performance Improvement Opportunity

Consistent with the operational definition presented above, the Coalition for Neurodiverse Learners did not seek out this needs assessment to address any specific challenges or problems they were facing. Instead, they agreed to participate in a proactive needs assessment to unearth opportunities to further maximize performance. Because the organization welcomes and depends on the efforts of volunteers, the practitioner easily obtained buy-in from the organization. Through an iterative and collaborative process, they agreed to explore 1) how participation in the non-profit's events contribute to parent efficacy, and 2) what opportunities there are to increase parent efficacy. Within this effort, the practitioner established operational definitions to help bound and scope the needs assessment effort. She defined efficacy as perceptions of one's own ability to produce a desired or intended result. Parent efficacy, then, referred to the extent to which a parent or caretaker of a child on the Autism spectrum perceives their ability to advocate for, address needs of, and assist their children in achieving desired outcomes. To fulfill the needs assessment, the practitioner took a layered, but methodical approach as outlined in the methodology.

Role of the Practitioner

As a Ph.D. student in the Instructional Design & Technology program at Old Dominion University, the first author completed this needs assessment as a program requirement under the advisement of her program chair (second author) and acted in a performance improvement consultant capacity. In an effort to conduct some

preliminary research on the perceptions of the burden that needs assessment participants experience, she opted to conduct this needs assessment for the Coalition for Neurodiverse Learners while embedding her burden-related research. Within this chapter, the authors will focus on how the approach to this needs assessment affected the participant experiences.

The practitioner was able to gain entrée into the organization for the purpose of this needs assessment relatively easily because she already had an affiliation with the non-profit. As the mother of a child on the Autism spectrum, she became acquainted with the organization two years prior and held a membership with the organization for one year. The practitioner was easily able to parlay this initial entrée as a parent affiliated with the organization to propose conducting an opportunities-based needs assessment on their behalf. It is this aspect of the practitioner's positionality that provides a unique context for this case, and in turn, served the needs assessment outcomes in a positive way.

CASE DESCRIPTION

Participant Types

The Coalition for Neurodiverse Learners and its network of constituents play a major role in the organization's fabric; therefore, they also played a major role in this needs assessment. Not only does the organization leverage its resources from within the organization, but they also depend on entities external to the organization to achieve its strategic goals. The main constituents to the organization are as follows, in accordance with how they were binned for this needs assessment:

- **Clients:** The non-profit has a Board of Directors, which functions as a Leadership Team. This group is comprised of the following roles: Executive Director, President, Vice President, Secretary, Treasurer, and two Committee Chairs. For the purposes of this research effort, anyone fulfilling these roles within the non-profit organization was considered a client of the project. All seven clients participated in this needs assessment.
- **Primary Service Recipients:** The primary audience for the non-profit's services and products are parents and caretakers within a Washington, D.C. metro area county who have at least one child on the Autism spectrum. Some of these individuals have officially paid memberships to the non-profit organization. Others are not formal members but either access the non-profit's resources on a pay-by-attendance schedule or are on the non-profit's

Insider Effects

mailing list. A total of 42 primary service recipients participated in this needs assessment.

- **Stakeholders:** Finally, each of the other partners was operationally considered stakeholders of the project. They include educators, county public school policymakers, professional service providers, and self-advocates. These individuals and groups may also benefit from the non-profit's resources but are not the primary audience for them. Students on the Autism spectrum are also stakeholders; however, they were not a part of this research. A total of seven stakeholders participated in this needs assessment.

Needs Assessment Methodology

To complete this needs assessment, the practitioner leveraged a combination of extant data review, observation, survey, interview, and focus group data collection. Overall, these combined, mixed methods served to accomplish a great deal. Though the needs assessment was scoped, it was also complex. To determine how participation in the non-profit contributes to parent efficacy, the practitioner: 1) documented baseline participation levels, 2) documented baseline efficacy levels of the parent and caretaker participants, 3) documented how much of that baseline efficacy can be attributed to the non-profit, and 4) documented the remaining needs in terms of efficacy as reported by the primary service recipients. To proactively determine the opportunities to increase parent efficacy, the practitioner 1) documented the desired efficacy levels for parents and caretakers from the perspective of each of the participant types, 2) documented the gaps between the baseline and desired efficacy via discrepancy analysis, 3) documented the enablers towards meeting the desired efficacy levels, and 4) documented the barriers against meeting the desired efficacy levels. Table 1 shows how each of the data collection methodologies served to accomplish each of these tasks.

Data Analysis

To address how participation in the Coalition for Neurodiverse Learners' events contribute to parent efficacy, the practitioner explored descriptive statistics on current levels of perceived parent efficacy as operationally defined above. She leveraged principles of isolation to determine the extent to which existing programming contribute to the currently reported levels of parent efficacy. The practitioner also planned to perform a correlation and forced entry linear regression of perceived parent efficacy, as a dependent, continuous outcome variable, on participation rates in the non-profit's events, the independent, continuous variable, to determine

Table 1. Coverage of needs assessment goals by methodological components

Needs Assessment Area of Opportunity	Needs Assessment Goal	Extant Data Review	Observations	Surveys	Interviews/ Focus Groups
AoO1: How non-profit contributes to baseline parent efficacy	Baseline participation levels	X	X	X	
	Baseline efficacy levels			X	
	Attribution of baseline efficacy levels to non-profit			X	X
	Remaining efficacy needs			X	X
AoO2: Opportunities to increase parent efficacy	Desired efficacy			X	X
	Gaps between baseline and desired efficacy			Comparison of Baseline Efficacy, Baseline Attribution to Non-Profit, and Desired Efficacy items (see above)	
	Enablers	X	X		X
	Barriers				X

the impact of these events on parent efficacy (felt need #1). However, the actual participation rate was not high enough to ensure the proper power to perform those statistical analyses.

Additionally, to address what opportunities there are to increase parent efficacy, the practitioner performed a discrepancy analysis between the current state of parent efficacy and the desired state to determine the gaps therein (felt need #2) (Swart & Kaufman, 2009). In addition to these quantitative approaches, the practitioner also performed a qualitative theme analysis (“Needs assessment evaluation,” 2015). Specifically, the practitioner completed a round of descriptive coding to summarize basic topics that emerged. Then, she completed a second round of focused coding with respect to the themes that either supported or contradicted the data from the other sources of the needs assessment (Saldaña, 2010). Finally, the practitioner determined recommendations to close the resulting gaps.

The Culmination of the Needs Assessment Project

The needs assessment project concluded with the practitioner presenting a formal presentation and report to the non-profit. These deliverables included an overview of the needs assessment project, methodology, findings, and recommendations. The practitioner also provided the clients with assistance in how to interpret the findings and recommendations before collectively determining where to take action.

Technology Concerns and Components

Those needs assessment practices that largely leverage Likert survey scales as the sole form of data collection have been criticized for not being humanistic or capturing the nuances of the lived human condition (Altschuld & Watkins, 2014). However, technology has evolved to a place where survey tools are now able to take a multidisciplinary approach via double and triple response scales. Web 2.0 tools and social media outlets, like Skype, Google Hangouts, Google+, and Facebook make data and information sharing more accessible to and from a larger audience (Altschuld & Watkins, 2014). Not only can participants or researchers alike leverage these tools from their computers, but they are often accessible via tablet or smartphone. Bidirectional data can easily be shared either in real time or near real time. While these resources were readily available, the practitioner took care to ensure the appropriateness of resources selected for the audience. For example, because there is a range in the socioeconomic status of the participants, the practitioner ensured the electronic survey platform would be free and accessible across multiple devices. Google Forms provided this functionality as well as a clean and user-friendly interface. She also made paper copies available for those without internet access.

Additionally, the practitioner leveraged Cisco Web-Ex technology to conduct interviews and focus groups with a subsample of participants who had already completed the survey and volunteered for this additional phase of data collection. All but two of the participants within this phase of the data collection leveraged web-camera-enabled technology to participate, thus allowing for synchronous, bi-directional communication and face-to-face interactions. This contributed to the ease of the data collection effort. One client mentioned, “I work better when I can see the person with whom I’m speaking.” The two that did not have a web-camera participated with full audio functionality and were able to see the practitioner. However, the practitioner was not able to see them.

Throughout the focus groups, participants were engaged not only with the practitioner but also with each other. Despite being in separate locations, they were able to engage in a number of co-construction, meaning-making turns, which confirmed for the practitioner that the goal environment was achieved. In several instances, participants finished each other’s sentences, discussed shared experiences, and asked clarifying questions. In essence, the practitioner was able to create and maintain a non-threatening technology-enabled environment in which participants were able to talk freely and engage with each other (Hays & Singh, 2012).

CURRENT CHALLENGES FACING THE ORGANIZATION

Throughout the needs assessment, a number of barriers emerged as they relate to the organization's desire to achieve gains in parent efficacy. Barriers are operationally defined as those individuals, organizational, and/or external deterrents or obstacles that may hinder the organization from achieving success in parent efficacy. When discussing barriers in the interviews and focus groups, external systemic barriers were cited across 83 instances and comprise the largest barrier type for the non-profit. While this category of barrier falls outside of the non-profit organization's bounds, they are still a part of the larger fabric of the community. These barriers are explained in the sections that follow.

Emotional Burden of Caring for a Child on the Autism Spectrum

There is a lot of mixed emotion along the journey of raising a child on the Autism spectrum, from discovering initial nuances to diagnosis, to finding therapeutic interventions, to advocating with the school system, to supporting students as they transition to adulthood and beyond. Across 23 instances, each of the participant types discussed the ways in which this emotional burden also shows up as an organizational barrier for the non-profit. As one of the client participants mentioned, a "problem that we face is our members are parents of children with special needs... so they have less time...less energy." While this burden is one of the reasons why the organization exists, it also impacts the organization in that "people are stretched very thin for time and aren't able to commit...at this level within the organization." So, the emotional burden at times works against the organizational goal of deepening the organizational structure, which would, in turn, lead to gains in parent efficacy through increased organizational services.

Range of Autism as a Spectrum Disorder

While the organization has scoped their area of focus to serve Autism-related needs in the county, Autism itself is a spectrum disorder. This means that there is no one Autism profile, no one set of needs, nor one set of strengths. Working to serve the primary service recipients can be challenging because of the neurodiversity and profiles within the group. This concept emerged as a barrier across 14 instances. As one parent participant mentioned, "there's such a range of different needs from different types of parents and kids on the spectrum" for the organization to address.

Insider Effects

Other client participants described they struggle to find the exact population upon which to focus because “[Participant A] some parents don’t want to disclose that their child is autistic...[Participant B] because they’re trying to function in a neurotypical setting...[Participant C] and we don’t know.” This certainly represents a challenge both to the parents and caretakers, but also to the larger organization trying to serve them.

Socioeconomic Factors

Another prevalent barrier is the socioeconomic constraints faced by many of the primary service recipients. Across six instances, clients and professional members describe the ways in which this issue serves as a barrier. Specifically, from the client perspective, income and cost concerns were noted as a potential barrier to membership within the non-profit. While one professional member discussed the overall concept of therapies for the ASD community being expensive, one client participant mentioned, “we talk about [the membership fee] periodically...\$40 is a lot for people who are paying ridiculous amounts for therapies.”

Other External Barriers

A number of other barriers were mentioned by the participants, and they are listed here:

- Size of the community (4 instances): While one parent participant specifically mentioned having difficulty attending events due to their distance in reference to their house, clients agreed that finding locations that meet the geographic needs of the large county is challenging.
- Challenges finding childcare (3 instances): Participants discussed difficulties finding appropriate childcare providers for their children, the price of childcare in the county, and the consequences of interrupted routines when placing your child under the care of someone else.
- Digital Divide (3 instances): While some parent participants requested on-demand digital access to the non-profit’s presentations, other client participants mentioned that some families within the county lack access to the internet. “Somebody mentioned at Back to School night at my kids’ school how they...prefer to do it on paper...they realized that there are kids who do not have internet access so they have to rely on the library or any free place where they can get the computer.” The same could very well be true for the parents and caretakers of those individuals.

- Dearth in therapeutic providers and/or insurance (3 instances): One professional member mentioned they are one of the only therapeutic providers for pediatric physical therapy within the county. Another parent participant requested the non-profit to provide a list of therapists and doctors. While insurance coverage can help with paying for these services, not all parents/ caretakers have such coverage or may run out of coverage before the end of a year.
- The transience of the Region (1 instance): One client described how the county is a part of a metropolitan area that involves a lot of movement into and out of the county. This affects some of the organization's membership and leadership goals.

SOLUTIONS AND RECOMMENDATIONS

Overview of Needs Assessment Findings and Recommendations

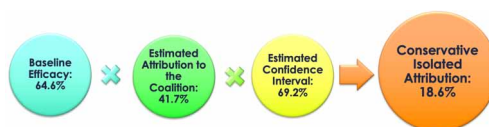
Validation of Organizational Performance Successes

The needs assessment yielded 38 findings describing the baseline efficacy of the primary service recipients, opportunities to increase parent efficacy, and the gap analysis. Overwhelmingly, there were a lot of performance related successes that emerged from this needs assessment which served to validate existing strengths within the Coalition for Neurodiverse Learners. For example, the baseline levels of the primary service recipients' parent efficacy were generally high despite the heightened stress of the barriers mentioned in the previous section. When asked to rate their current level of parent efficacy on a scale of 0% (i.e., not at all efficacious) and 100% (i.e., completely efficacious), the primary service recipients reported an average of 64.6% parent efficacy. The practitioner then conducted an impact analysis, as shown in Figure 1, applying principles of isolation and confidence adjustments to ensure the efficacy ratings reflect what can actually be attributed to the Coalition for Neurodiverse Learners' services (DeTuncq & Pinckney-Lewis, 2017; Phillips, 2017).

To accomplish this, primary service recipients were also asked to report the percentage of their efficacy that they attribute to the organization's services (i.e., 0% attributed - 100% attributed) as well as their level of confidence in that rating (i.e., 0% confident - 100% confident). The practitioner then isolated the effect of those services by multiplying the average efficacy rating (64.6%) by the average estimated

Insider Effects

Figure 1. Isolation technique to determine the amount of parent efficacy attributed to the Coalition for Neurodiverse Learners' services



percentage that respondents attribute to the organization's services (41.7%) and then by the estimated confidence interval (69.2%) to obtain a conservative isolated attribution. Based on these calculations (.646 x .417 x .692), the organization has directly contributed a minimum of 18.6% to overall Parent and Caretaker baseline efficacy. These techniques of isolation and confidence estimates do shrink the initial self-reported rates of attribution to the Coalition for Neurodiverse Learners. While the actual attribution may be more, the clients can use this 18.6% figure and know that, without a shadow of a doubt, they are contributing at least this much to the parents and caretakers they serve in this one area of efficacy. As anticipated, this needs assessment approach was appropriately proactive in addressing ways to maximize the performance-related outcomes of all the good work they were already doing.

Opportunities to Maximize Performance Related to Parent Efficacy

While the Coalition for Neurodiverse Learners was found to be already positively contributing to outcomes in parent efficacy, there were also some recommendations from the needs assessment to enhance this area of performance. Specifically, the primary service recipients reported their desired parent efficacy levels, which revealed there was room for growth. When asked to provide their desired level of parent efficacy on a scale of 0% (i.e., not at all efficacious) and 100% (i.e., completely efficacious), the average response was 86.5%¹, representing at least a 20.1% gap in desired parent efficacy levels. These primary service recipients further reported their top two skill deficits that would enhance their sense of efficacy: better advocacy skills and increased transparency with the local school system. Again, though the Coalition for Neurodiverse Learners was already supporting their primary service recipients in a meaningful way, they identified specific areas in which to make improvements. These results are meant to highlight some of the main results from the needs assessment but are not comprehensive as they are not germane to the main point of this chapter: how empathic approaches to needs assessment can contribute to positive experiences for the participants. The remainder of the results and recommendations will be released via a forthcoming publication.

Empathic Approach

Empathy is the ability within which we have to feel what another person is feeling. Within the design and human performance contexts, empathic approaches are becoming entrenched within practice. In this needs assessment, the practitioner was able to engage in the empathic, assessing needs from the primary service recipients perspective, while immersing in the primary service recipients lives, because she is also a member of that constituent group. As the mother of a child on the Autism spectrum and a member of the non-profit, she had a deep understanding of the complexity of situations, circumstances, and emotions that emerged throughout the data collection. In her focus group with the clients, she professed:

[Practitioner] I stumbled upon [the Coalition for Neurodiverse Learners] right after my son was diagnosed and that, as you know, for parents is an extremely confusing, emotional, turbulent time and I went through a large period of time where I was sort of blaming myself for things. And I will never forget and will be forever grateful for the parent panel that I sat in and I saw such a wide variety of parents who had kids on the spectrum and realized that maybe some of this necessarily wasn't my fault and I felt like I sort of found my people. So I feel like I just want to thank you all and let you know that even if parents haven't told you or we aren't able to, and I get very emotional about it, but just know that I'm very...

[Client Participant]: We get it.

[Practitioner]: ...thankful for all of your work and that I'm happy to do this work with you, so thank you.

Given all the current challenges facing the organization and the constituents, entering into the data collection space with an empathic approach was essential. While it was important to obtain the data, the practitioner had to take great care to ensure the participants felt comfortable and not judged in any way. She achieved this, in part, by her transparency in sharing her own story with the participants. She was one of them, not merely an observer of them.

OUTCOMES OF THE EMPATHIC APPROACH

Increased Client Engagement and Access to Data

Willingness to Engage

Organizations engage in needs assessment far less than they should. Often this is due to the perceptions of the burden that will come from their involvement. However, the clients in this needs assessment demonstrated a willingness to engage in the process from the onset. The practitioner was able to gain entrée and buy-in from the non-profit clients quickly. The practitioner approached the Executive Director of the non-profit at their booth at a local county event. At that time, the client immediately confirmed their interest in a needs assessment endeavor. Within weeks, the practitioner presented a proposal of options to the Board of Directors and obtained consent to move forward with the needs assessment as described within this report.

Access to Data

Perceptions of inconvenience often lead to client reluctance in providing needs assessment practitioners with access to data or organizational resources. Data are key to the needs assessment process; they drive the context and understanding of the individual, team, and organizational needs as well as the recommendations that emerge. This needs assessment was no exception. The clients provided the practitioner with access to a plethora of extant data and need assessment participants. They provided the practitioner with access to eight organizational process documents and dozens of participant reaction feedback forms from their 2017-2018 events. While they did not provide the practitioner with direct access to their constituent mailing lists, they did send out three direct-emailed needs assessment-related communications over the course of eight weeks to those constituents on behalf of the practitioner. They also provided additional in-person access to potential needs assessment participants by inviting the practitioner to speak with parents and caretakers at the beginning of the two events she observed. The practitioner was able to leverage these opportunities to solicit additional participants in the needs assessment.

Favorable Interactions with the Practitioner

On average, survey participants across participant types reported favorable interactions with the practitioner ($M = 4.41$, $SD = 0.80$, where 1 = “Not at all Favorable” and 5 = “Very Favorable”). The participant type with the highest reactions were the Clients ($M = 4.57$, $SD = 0.79$). The stakeholders ranked their interactions slightly less favorably ($M = 4.50$, $SD = 0.84$), and then the primary service recipients ($M = 4.37$, $SD = 0.82$).

Operating within the interviews and focus groups as a practitioner-participant allowed for connections on a human level to emerge organically. In one primary service recipient interview, the practitioner and participant established a connection because they both have sons with ASD that have similar behaviors in reaction to what they consider social justice issues:

Practitioner-Participant: Cause I even have it on my son's [Individualized Education Plan].

Participant: Oh really?

Practitioner-Participant: Yeah cause he shuts down when he thinks he's in trouble.

Participant: Yeah, my son like he will lash out....even if it's not on him. [laughs]

Practitioner-Participant: yeah, yeah, [they're] the defenders of all the kids [laughs] He's got a good heart.

Participant: Yeah I love that.

Another client participant reported they appreciated the exchange of “personal anecdotes.” Similarly, in both of the professional member interviews, when given the opportunity to ask the Practitioner questions, they both admittedly wanted to ask personal questions as follow-ups to the discussion. Each of these instances is evidence of the human connections that were established within the data collection process.

Favorable Experiences in the Process

Additionally, on average, all survey participants across participant types reported feeling like a partner in the needs assessment. In response to the survey prompt “I feel like a valued partner in this needs assessment,” the overall reactions were positive ($M = 4.42$, $SD = 0.86$, where 1 = “Strongly Disagree” and 5 = “Strongly Agree”). As anticipated, the clients had the highest average reactions ($M = 4.71$, $SD = 0.76$); the practitioner had the most interactions with this group from obtaining buy-in for the assessment. The next favorable responses came from the stakeholders ($M = 4.50$, $SD = 0.84$), followed by the primary service recipients ($M = 4.35$, $SD = 0.89$).

Similar sentiments were shared from the interview and focus group participants. While all of the clients in the focus group reported feeling like a partner in the discussion, one client explained, “it was an iterative process. You would ask follow-on questions and provide some...feedback and I think that really helped make me feel like we were a partner and that I personally was not being judged or examined.” Two participants in the Parent/Caretaker focus group attributed their feeling of being a partner in the discussion to the fact that “it was...a very active discussion that we were participating in.” Both professional members agreed to this sentiment in their interviews. One elaborated, “I feel like you are genuinely interested in the answers and genuinely want to help [the Coalition for Neurodiverse Learners].” None of the participants reported feeling like a subject being studied.

Reflections

Needs assessment is a valuable tool and an integral component of both instructional design (ID) and HPT spaces (Morrison, Ross, Kalman, & Kemp, 2013; Sleezer, Kelsey, & Wood, 2008; Stefaniak et al., 2018). However, it is too often neglected (Aull, Bartley, Olson, Weisberg, & Winiacki, 2016) and many times due to the aspects of the perceived burden on the part of the participants. Moreover, conducting an effective and efficient needs assessment requires a number of skills on the part of the practitioner. There is both a science and an art to conducting a needs assessment in this way. In this case, the practitioner not only approached it with organizational sensitivity, but also a personal sensitivity that positively affected the needs assessment experience for the participants. That personal sensitivity helped to break down and eliminate unnecessary distance that might have been in place between the practitioner and participants. Being personally entrenched within the ASD parenting community not only gave the practitioner an insider perspective to the challenges faced by the organization and its stakeholders but also helped to establish a non-judgmental

environment for the participants. She was able to create a shared understanding of the needs assessment process, which allowed the participants to share their own stories as they related to parent efficacy. While having such a close affinity with an organization is not the only way to create a shared experience within the needs assessment process, it begs the question: how can needs assessment practitioners create a comfortable, non-judgmental space for their participants? The more pleasant the experience, the better the chance for obtaining willing, engaged participants and the appropriately contextualized data to achieve recommendations to meet the needs of the organization being served. This is what the practitioner in this needs assessment strived for and hopes to have achieved.

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KEY TERMS AND DEFINITIONS

Autism: A spectrum disorder often characterized by challenges with communication, social skills, and repetitive behaviors.

Barriers: Those individuals, organizational, and/or external deterrents or obstacles that may hinder the organization from achieving success in parent efficacy.

Clients: Leaders or points of contact within the organization for which a needs assessment practitioner is conducting a needs assessment.

Discrepancy Analysis: Process of determining the gap between desired and current states of performance or other outcomes.

Efficacy: The perceptions of one's own ability to produce a desired or intended result.

Empathy: The ability to feel what another person is feeling.

Isolation Technique: Means of determining what portion of outcomes can be attributed to an intended intervention alone, and not some other cause.

Needs Assessment: The data-driven search for opportunities to maximize individual, team, or organizational performance by contributing to the effectiveness, efficiency, and/or ease of supporting organizational goals.

Parent Efficacy: The extent to which a parent or caretaker of a child on the autism spectrum perceives their ability to advocate for, address the needs of, and assist their children in achieving desired outcomes.

Primary Service Recipients: The primary audience and recipients of an organization's services.

Stakeholders: Individuals or entities with a vested interest in the organization for which a needs assessment is being conducted. They may be partners, supporters, or otherwise, have a vested interest in the organization.

ENDNOTE

- ¹ Participants responded to this item via a 5-point Likert scale item. For the purposes of this calculation, the researcher assumed the median value from each chunked percentage range for each respondent. The researcher then multiplied that median value by the number of respondents selecting that striation and divided that total amount by 41 total respondents on that item.

APPENDIX: QUESTIONS FOR DISCUSSION

1. This case presented some of the benefits of an empathic approach in conducting needs assessments. What are some of the concerns when practitioners are close to the data as was the case in this project?
2. It is not always the case for a practitioner to have an inherent closeness with the organizations for which they are conducting needs assessments. What are some other ways practitioners can take an empathic approach when conducting needs assessments?
3. There are several models of needs assessment. How does the approach presented in this case compare or contrast to the methods you use in your own practice?
4. In this case, the practitioner conducted a proactive needs assessment that was not requested to address an explicit problem. What is the value of being proactive when conducting needs assessments? How does that differ from those that are reactionary or completed in response to a specific known organizational problem?
5. Obtaining buy-in to conduct needs assessments for organizations is often a tedious process. How have you gone about obtaining and sustaining buy-in to complete an appropriately thorough needs assessment?

Chapter 9

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

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EXECUTIVE SUMMARY

This chapter posits the use of Thomas Gilbert's Behavior Engineering Model to improve human performance in the workplace. The author suggests that it is critical to apply a holistic approach when approaching any human performance improvement initiatives. Sales within an organization is a human performance issue and recurring sales performance problems should be addressed by delving to the root of the human performance issues at hand. It is critical to consider not just the repertoire of human behavior, but also examine the supporting environment, to ensure it provides the necessary impetus to improving performance.

DOI: 10.4018/978-1-7998-0054-5.ch009

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ORGANIZATION BACKGROUND

Cornucopia Learning Systems LLC (CLS) is a training solutions company focused on providing soft skills and HR training solutions to clients in the United States and Canada (USC) region. CLS is an independent organization that supports local as well as multinational clients by providing 360 VR-based eLearning solutions and workshops to solve their various HR and soft skills training needs. CLS employs independent contractors to film and edit video scenarios, while they have an in-house team that designs and develops the training curricula.

CLS, in the 30 years of its existence, has always been at the cutting edge of technology. The company was started by two brothers, Ron and Sam Rittenour, as a result of their mother being harassed at work. Ron had a degree in media studies and Sam had a degree in law. They wanted to provide appropriate training to employees to recognize and respond to harassment. They began by putting together half-day workshops and inviting HR specialists to speak to the participants. They were one of the first companies to incorporate videos in their training and adopt computer-based formats to make their training widely available. CLS strives at providing a range of budget-friendly solutions to mom-and-pop organizations as well as custom, high-end solutions to big conglomerates.

The company headquarters are in Richmond, Virginia. What started as a family business, now employs 569 employees in several departments including human resources, course creation, marketing, sales, accounting, contracts, product stewardship, and fulfillment. A director governs each department with managers serving as direct reports. Each manager is responsible for a team leader and several team members. The sales team is the largest, with 115 employees in the United States and 46 in Canada. Throughout its existence, there has been a good amount of nepotism demonstrated in the company. The founders employed friends and relatives in senior positions and that trend has continued. There have been external hires as well, primarily because some directors and HR folks saw the need to bring in fresh talent and new ideas. But this has led to two camps with different emphases – the old timers looking to keep doing things the old ways and the newcomers wanting to infuse new ideas. This constant conflict has, over the past few years, severely limited the company's ability to mature and grow.

Senior leadership had been urging this division, primarily using it to generate some competition. But now, with sales dropping steadily over the past few years, the camps are quick to blame one another, and senior leadership has been forced to acknowledge that something has to change. In a meeting with the key company

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

stakeholders, the decision was made to focus on improving sales performance. The COO decided to change the compensation and bonus structure to motivate salespersons to perform better.

Traditionally, CLS did not have its own content management system. Three years ago, the company made a huge investment in building a content management system, instead of partnering with a third party. They hired a small team in China to work on the CMS and hired a Senior Director of Technology to oversee the process. The system is still in nascent stages and faces technological issues.

For performance to be truly measured and improved, it must first be defined, and exemplary performance within a salesforce needs to be determined. This will help identify what people should deliver and why it should be delivered in order to add measurable value to and for all internal and external stakeholders.

Changing trends in how end users consume data has impacted the sales of learning products that are more traditional in nature. Millennial workers spend a major part of their days on mobile devices and consume information in shorter segments, whereas veteran workers may prefer traditional methods of consuming information.

Thomas Gilbert's Behavior Engineering Model can be used as a diagnostic tool to diagnose performance deficiencies (Gilbert, 2007). According to Gilbert (2007), all instrumental human behavior has two aspects of equal importance: a person with a repertory of behavior and supporting environment. Behavior, therefore, is a transaction between a person's repertory and the supporting environment. Performance is the accomplishments that come with a price tag.

SETTING THE STAGE

The organizational structure at CLS has traditionally been hierarchical. Nepotism in hiring decisions fed into the hierarchical structure. With new hires coming into the business, though, the traditional hierarchical structure started experiencing challenges. The company hired a new sales director in 2016. The sales director, Larry, an external hire, was employed for his impeccable sales performance at a competitor company. The sales manager, Jose, however, is the son of the COOs best friend. Jose often bypasses Larry and gets his plans signed off by the COO. The conflict between Larry and Jose has impacted the sales team. The team often receives conflicting orders from the two leaders and faces penalties for not following

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

orders. Key projects are pulled from salespersons that are not in a favored position and handed off to others.

Traditionally, CLS did not have its own content management system. Three years ago, the company made a huge investment in building a content management system, instead of partnering with a third party. They hired a small team to work on the CMS and appointed the CFO's son, Anuj Sharma, to manage the team. Anuj has a certificate in software development and had been fired from his previous job, before this appointment. The system is still in nascent stages and faces technological issues. Also, the team doesn't respect Anuj because he is the most unqualified member of the team and often falsely takes credit for the team's work.

The processes in CLS are a combination of traditional and modern. Several processes are residual from the family business era, while new processes are often adopted by different departments, in a silo, without consideration of the consequences on the rest of the business. Multiple departments at CLS are interdependent on one another, yet the organization functions in the silo mentality. The old-timers and the newcomers often follow different processes, creating turmoil within departments. Senior leadership believes that each department needs to do what is necessary to meet their personal and team goals. This has led to teams blaming other teams for shortfalls and an overall lack of trust within the organization.

Sales do not often communicate the feedback they receive from clients to the course creators. The feedback gets lost in translation. Course creators have not involved in decision making of which courses need creation. The decisions are made by the product stewardship, sales, and marketing teams. Clients continue to face problems with the CMS. Salespersons have to deal with angry clients on a regular basis. A number of clients have chosen not to renew their eLearning contracts, impacting sales.

In the past, CLS employed a number of subject matter experts, who were also skilled in the art of facilitating workshops. With the foray into using immersive technology within the workshops, CLS had laid off several of the experts. Instead, they had chosen to partner with an immersive technology company. The task of coordinating with the third-party company was given to Anuj, as he was considered to be the expert in the area of technology. Anuj had decided to move forward with using past course structures and revamping them using VR/AR. The use of immersive technology, though planned for, was proving to be a costly affair and CLS had decided to offset some of the cost by charging the client more for the workshop. This impacted sales to mid-level companies.

CASE DESCRIPTION

CLS leadership is contemplating changing the compensation and commission structure for its sales organization to motivate salespersons to improve its performance. For the past year, sales are at an all-time low, organization-wide, at CLS. Management is concerned and is pushing the sales director to either consider layoffs or to change the compensation and commission structure of the sales team. The sales director decided to seek the help of an internal performance improvement consultant to understand the recurring performance problems and help sell the new compensation and commission structure to the sales team.

Vanessa Huang, an internal performance improvement consultant, had been working with the company for just about a month before she was requested to help with this issue. Ritika Mahajan, the director of Learning and Development, had hired Vanessa to assist with human resource development engagements for custom clients, as part of the learning and development team. She was now tasked with working on this performance issue.

Vanessa met with the sales director to understand what change was being made, why and what her role was to be. Lorenzo began by talking about the hard work his team puts in. He was quick to blame the limitations of the CMS, the use of expensive, new technology in the workshops, the quality of the training and the problems with nepotism within the organization. He was also upset about his hand being forced and stated unequivocally that he was unwilling to let go of his team members! Vanessa asked him to share performance reports for the sales team.

Vanessa realized she had to dig a little deeper and wider to get a complete picture and an enhanced perspective of the issues within the organization. She decided to set up a series of interviews with different employees, at different levels and within different teams in the organization.

After meeting with Lorenzo, Vanessa set up a meeting with Ritika. She began by talking about the quality of the eLearning courses and the workshops. Ritika had worked with CLS for almost 20 years and had seen a lot of transitions. She expressed her frustration with not having access to subject matter experts and how that impacted the quality of the training. She was not happy with the current partners filming the video-based training scenarios. She thought there was a little too much emphasis on dramatization, instead of actual training content. When asked about the shift to using immersive technology, Ritika was all fired up. Even though she was the director of learning and development and had a degree and experience in learning,

this responsibility had been giving to Anuj instead of her. Ritika had extended her help to Anuj and offered to collaborate, but he had refused her help. Vanessa realized she was going to have to come back to this discussion with Ritika. She wrapped up the discussion with Ritika and moved on to focusing on her next interview.

A week later, Vanessa met with Yakob. Yakob started off by asking Vanessa about her discussion with Lorenzo and warned her to beware of his duplicitous nature. Vanessa skillfully turned the discussion back to Yakob and the sales team. She asked him what the pain points of the team were and was surprised at the insights he provided. Yakob had done a systematic analysis of each of his team members' strength and weaknesses. He spent one-on-one time with each of his team members on a bi-weekly basis to get a sense of what was working and what wasn't. He said he often took their concerns to his dad, to bring to the c-suite. He also expressed his frustration with Lorenzo trying to turn the team against him and his dad. Vanessa requested him to collaborate with Lorenzo to identify some team members she could interview. Once she had the list of names, she set up interviews with the sales team members.

Vanessa's next step was to meet with the CMS team leader, Raj Joshi. Raj said he spoke for the entire team and expressed their frustration with the limited funding, obsolete technology, and inept management. He talked about his own qualifications and past work experiences and how he would have been the right person to lead the team. He thought Anuj was in way over his head but was unwilling to accept that. When asked about the problems clients were facing with the CMS, Raj became defensive. He talked about the tireless efforts of his team for the last year. They often worked late and on weekends. Raj said the CMS team had a total of 13 employees. Anuj was the manager, Raj the team leader, who had 11 people reporting to him. The total number of clients on the CMS was 1789. It was hard for the 12 team members, excluding Anuj, to service all those clients and continue working on innovations regarding the CMS.

Anuj kept making excuses to not meet with Vanessa. After several tries, she decided to move on with her analysis and reporting, without talking to Anuj.

CURRENT CHALLENGES FACING THE ORGANIZATION

Vanessa asked for a week to go through all her notes. At the end of a week, she approached Ritika and asked her to set up a one-day workshop at a remote location for the entire mid-level leadership team, directors and managers so she could share her findings.

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

When the team got to the venue, Vanessa shared the agenda for the day:

10 min – Introductions

10 min – Ground Rules & What to do

40 min – Explain the core concepts

10 min – Silent brainstorming of workplace challenges

10 min – Post your ideas about workplace challenges

10 min – Carefully review all posted ideas

30 min – Discuss, condense or split ideas

60 min – Share findings

60 min – Lunch

40 min – Next steps

After everyone had posted their ideas, two clear pictures emerged. Each department blamed another department for their problems. Each department relied heavily on other departments for their success.

Vanessa then shared the 3-step approach she had used to understand current performance standards for the sales team.

Step 1: I interviewed the sales team members as well as the sales manager and director, to understand expected performance, communication of these expectations, frequency of the communication, and the feedback process for unmet expectations.

Step 2: I reviewed sales reports outlining the team’s performance over the past few years. I also reviewed performance appraisal goals and objectives set up at the beginning of the year for three salespersons and benchmarked their current performance against those objectives.

Step 3: I interview other team leaders, managers, and directors to understand their interaction with the sales team and how their performance impacted sales performance.

Vanessa summarized the current understanding of good performance --“Signing new clients, renewing current clients and meeting sales targets.” Implicit in this understanding of performance are the following:

- Contacting old and new clients (including cold-calling)
- Servicing current clients
- Servicing renewals
- Learning about new products and offerings on a regular basis

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

Finally, Vanessa talked about Thomas Gilbert's Behavior Engineering Model (BEM). She explained the six elements that impact human performance as per the model. She then explained each element of the behavior repertoire of a person that impacts human performance.

1. **KNOWLEDGE:** Salespersons need to constantly add to their knowledge base to keep abreast with the changing trends. Not only that, they need to be aware of new products and offerings that are created within CLS. Internal training and learning opportunities are sparse and are not of the highest quality. Salespersons are invited to new product launches. Their feedback is considered when identifying new product requirements. 89% of the salespersons interviewed said they were not provided the necessary training to do their job well.
2. **CAPACITY:** Salespersons have no say in the yearly sales goal set for them. Take salespersons X and Y for example. Table 1 shows their yearly goals for the past five years. Salespersons X and Y saw a 100% increase in their sales goals in 2016, as compared to the sales goals in 2015. This may have been due to several factors – outstanding performance the year before, new accounts handed to them (accounts that ex-employees may have been handling), restructuring of geographies, etc. While the sales goals were doubled, the supporting environment remained the same. One salesperson had to deal with disgruntled clients facing technical issues with the CMS. Salesperson X has almost 50% renewal business as the sales goal. She had performed well above-target in 2015. In 2016 she was unable to meet her greatly increased target. She revealed renewals are a complicated and archaic (almost 13-step) process that consumes a lot of time and effort. When focused on renewals and getting them through, she had limited bandwidth to generate new leads or grow new business.

While salespersons like the myriad offerings that they can sell to their clients, often this can also result in a divided focus. Let's look at the data in Table 2 as an example.

Salespersons A and B both started in the same year, 2016 (Table 2). In year one, salesperson A sold instructor-led training and custom engagements, but the focus was spread over several different clients. In years two and three, salesperson A changed tactics and sold more ILT offerings. The lesson, however, came at a price. The employee was put on a performance improvement plan year one.

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

3. **MOTIVES:** Are salespersons willing to work for the available incentives? The answers to this question were complicated. Salespersons expressed reasons for their willingness to work, but few had to do with available incentives. Some salespersons have been with the organization for years, know the business, and value the relationships they have built with clients. Most cherish the relationships they have built with their colleagues.

The second part of the BEM involves the supporting environment. Vanessa covered the three elements critical to the performance that fall under this aspect.

4. **DATA:** There are no descriptions of what is expected performance or clear measures of expected performance, only a total sales target per salesperson. Each salesperson determines the mix of products on which they want to focus their selling efforts (eLearning offerings and/or the CMS), instructor-led and custom offerings and now, VR.
5. **TOOLS:** At CLS, the many branches and even teams within the same location tend to work in silos. The general perception is that the organizational structure and process makes it difficult to openly share information. Collaboration doesn't happen often.
6. **INCENTIVES:** The current incentive structure is a 75/25 split – 75% base salary and 25% commission. Salespersons are eligible for the 25% commission if they meet 100% of their sales goals. The new incentive structure drops base salaries to 60% while increasing commissions to 40%. It behooves the organization to ask, how can incentives be improved and made more directly contingent upon good performance?

In the past, salespersons collaborated with other sales folks to service clients and win business. There is growing unwillingness to do so because of the need to split revenue and because of complicated compensation structures. Some salespersons fear they are compelled to sell 'small' and put in more effort to make up the same numbers. Often salespersons know what they made only when they get their paycheck in hand. If a salesperson works very hard through the year but loses clients on account of systemic issues and are unable to reach 70% of their sales target, they lose their commission. Any target above 70% wins them commission, but only when they reach 100% of their target, do they receive 100% of their commission. There are no added incentives or a bonus for overachieving their target. Salespersons also felt they did not always have sufficient career-development opportunities, which deprives them of a great incentive for improving performance.

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

Table 1. Comparison of sales goals for salespersons X and Y

Year	Salesperson	Total Target	% To Goal
2014	X	595,897	135
	Y	702,326	104
2015	X	643,528	154
	Y	615,480	128
2016	X	1,463,880	94
	Y	1,155,429	100
2017	X	1,222,000	95
	Y	1,100,000	100
2018	X	898,063	103
	Y	847,798	84

Table 2. Comparison of sales goals for salespersons A and B

Year	Salesperson	Total Target	ILT	CUS	EL	VR	% To Goal
2016	A	187,797	18,205	22, 885		-	35
	B	194,687	176,817	-	44,145	-	113
2017	A	210,000	234,822	44,799	41,400	-	153
	B	240,000	217,645	46,858	28,970	-	122
2018	A	317, 469	202,808	-	29,348	80,533	98
	B	268,098	129,700	76,736	-	-	77

Note: ILT = Instructor-led Training, CUS = Custom training, EL = eLearning, VR = immersive technology.

SOLUTIONS AND RECOMMENDATIONS

To measure performance, the behavior repository of the salespersons and how it is impacted by the supporting sales environment must be considered. In performance, the behavior is a means, and its consequence is the end. (Gilbert, 2007). If this consequence is positive and leads to an accomplishment, we can say the performance is acceptable performance. Greater the accomplishment, better the performance, right? Well, it depends on the cost of the accomplishment; in terms of time, money, or effort. In order to define exemplary performance, then, we must consider both the accomplishments as well as the cost of these accomplishments.

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

Vanessa told the leadership group that if the supporting environment contributes to an increase in the cost of the accomplishments, then changing behavior alone would not result in improved performance. Changes would need to be made in the supporting environment as well. And that was exactly what was happening at CLS.

1. **KNOWLEDGE:** This includes both training and non-training interventions, provided by the organization, to impart knowledge and enhance skills. Training is non-existent at CLS. If employees want to gain or grow knowledge or skills, they have to initiate efforts on their own time.

Reflect and Answer: What can the organization do to improve in this area?
How will improving in this area boost sales performance?
2. **CAPACITY:** Performance goals are set at the beginning of the year. Salespeople are told what their goals are, but their input is not sought in setting those goals. Nor are they asked if those goals are feasible. When clients cancel contracts, the salesperson is impacted. The cancellation may be because of bad systems or quality of the courses. The root cause of the matter isn't explored.

Reflect and Answer: What are other deficits in this area within CLS?
3. **MOTIVES:** Few salespersons at CLS are appreciative of the available incentives provided by the organization. Most are driven by the relationships they have formed with their clients to service them well and to stay with the organization.

Reflect and Answer: What are some things that can be done to address this element?
4. **DATA:** Every individual in the organization needs to know what they need to know to do their jobs well. This includes expected accomplishments, conditions to achieve these accomplishments and feedback about how they are doing. No only the sales team, but every team in CLS felt that they were lacking in this department. The sales team also talked about the conflicting information they often received from their two leaders. This leads to an impact on performance. New employees don't necessarily know who to approach for help in other departments because of the silos within the organization.

Reflect and Answer: What are other deficits in this area within CLS?
5. **TOOLS:** This element covers not only tangible tools used to perform tasks but the work processes and understanding of those processes as well. Subject matter experts, references, user interfaces, technology are also part of this element. The sales team at CLS have access to tangible tools to perform their tasks, but these other tools are either missing or inefficient.

Reflect and Answer: Do all employees at CLS have access to all the tools they need to do their job well? What other tools do you think could be beneficial?

Sales Improvement Initiative Reveals Need for Performance Improvement Interventions

6. **INCENTIVES:** This was the focal point of the discussion. Salespersons were worried that their base salary was being reduced. They were not sure from week to week how much money they would be taking home. Several had mortgages and personal debts they were worried about paying back. If they had only their efforts to depend on, they would work harder and sell more. But the problems with the CMS and quality of the training were outside their purview and clients were canceling contracts or not renewing because of those reasons. CLS did not offer any non-monetary incentives.

Reflect and Answer: Should CLS move forward with this compensation and commission structure change? How do you think it will impact sales?

Vanessa summed up her discussion by sharing her thoughts and recommendations:

1. Exemplary performance is characterized by worthy accomplishments that come at a low cost (Gilbert, 2007).
2. CLS isn't providing sufficient performance feedback and learning opportunities to enhance the behavior repository of the salespersons.
3. The supporting environment contributes to an increase in the cost of the accomplishments through lost effort and time in dealing with archaic processes. Renewal is a 13step process, that can easily be simplified. The CMS issues are causing delays and canceled contracts. When the cost of accomplishments goes up, performance becomes an expensive affair, leading either to a loss in revenue or a loss in manpower, as CLS was proposing to do.
4. Individualized sales goals by different learning solutions should be provided to each salesperson based on their individual skillset and the organization's focus.
5. Adequate financial incentives need to be made available contingent on individual performance. Non-monetary incentives should be made available. This can be done via additional rewards and recognition initiatives.
6. Lastly, career development opportunities need to be identified and made available contingent on individual performance. At CLS, promotions depend on who is an authority and how much nepotism they are allowed to demonstrate. Employees need clear growth paths that are not contingent upon how much favor they hold with management.

CONCLUSION

The stakeholders at CLS decided to implement the new compensation and commission structure. They also directed Lorenzo to fire 10% of the sales force for non-performance. 17 of CLS' better salespersons resigned and sought employment elsewhere. Vanessa's efforts were applauded, and she was given a promotion. Vanessa stayed in the new role a few months, before seeking employment elsewhere. In her exit interview, she mentioned she did not feel valued at CLS. The CMS ran into serious issues and had to be temporarily shut down for three months. CLS lost four major clients worth 2 million dollars.

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KEY TERMS AND DEFINITIONS

Conglomerate: Multiple business entities operating in different industries under one corporate group.

Exemplary Performance: Accomplishments that come at a low cost.

Independent Contractor: A person or entity contracted to perform work for another entity. Work can happen at a remote location or on the premises of the hiring entity.

Nepotism: People with power or influence favoring their friends or relatives with jobs.

Performance Improvement: A form of organizational development that focuses on increasing output and improving efficiency.

Chapter 10

A Decade's Worth: A Construction Firm's Journey From Recovery to Growth

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EXECUTIVE SUMMARY

After witnessing a year-on-year growth of 50% since its inception in 1993, Ziggurat Developers was well on its way to being the next niche, technically sophisticated, and edgy construction company in Mumbai, India. This case takes a deep dive into how winning a prestigious construction contract in the country led to Ziggurat's loss of revenue, cash flow deficits, year-on-year losses, high financing costs, loss of banking, idling of resources, loss of credibility, and high employee turnover rate. Instead of these significant contracts providing a strong foothold in the construction industry, it destroyed Ziggurat and the recovery took a decade. Performance improvement is often the study of how to improve performance when discrepancies are confined to a silo or a subset of functions within an organization. But how do you get back to exemplary performance when you are boxed in and there is no way out?

DOI: 10.4018/978-1-7998-0054-5.ch010

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ORGANIZATION BACKGROUND

Ziggurat Developers was founded in 1993 by a civil engineer, Ajit Das, along with his spouse, Rumi Das. Prior to setting-up Ziggurat Developers, Ajit Das held senior management positions in organizations that were considered to be among some of the largest infrastructure and construction companies because of the revenue and resources that were available at their disposal and were well respected for their engineering excellence. Ajit through his affiliation with these organizations had spearheaded landmark projects contributing to his firm's leadership in iconic and complex large-scale operations, simultaneously, honing his technical skills and establishing his leadership across sectors of civil, design, and construction.

Through Ajit's growth with such organizations for over 25 years, Ziggurat Developers was founded on similar principles such as professional culture, business ethics, and management practices. The organization is located in Mumbai, also known as Bombay, the second most populous city in India. Mumbai the capital of the Indian state of Maharashtra, lies on the west coast of the country, was named a global city in 2008. The organization since its inception in 1993 has been registered as a contractor in the unlimited category with the Government of Maharashtra. This means that the organization can undertake projects where the contract value is unlimited. The Public Works Department (PWD) is the body that issues the category for civil work. In this instance, for Ziggurat Developers it was the unlimited category, for civil work. This category from the PWD is applicable countrywide, which means the firm can undertake and execute construction projects anywhere across India with no restrictions imposed to the monetary value of the contract. This also means that Ziggurat Developers can compete against global engineering and constructions firms vying for the same contract. Over the years Ziggurat Developers received construction contracts from Central Government, State Government, World Bank as well as private sector corporate bodies and each one of those contracts were successfully executed. The organization has executed and continues to execute residential and commercial infrastructures, industrial structures, bridges, culverts, viaducts, and related infrastructural projects.

Leadership Profile

Ajit Das held a Bachelor's degree in civil engineer (B.E. Civil) and held the designation of a Chartered Engineer (CEng). He was also a Member of Institution of Engineers (MIE) as well as a Member of Indian Society of Earthquake Technology (MISSET). Through his career, he has held several senior positions across organizations. These included leading firms in civil engineering known for pioneering innovations such as long-span bridges, underwater concreting, reinforced, and prestressed concrete to conglomerates with diversified businesses in sectors such as oil refinery, construction, energy, metals and mining, and more. His professional titles have ranged from Technical Manager, Vice President, and Chief Executive Officer (CEO) across his career spanning two decades. He has notably held the position of a CEO a couple of times before the inception of Ziggurat Developers, where he now continues to serve as the firm's Managing Director since 1993.

Ajit reached out to his spouse and sought her help in starting up Ziggurat Developers. Rumi Das holds a Master's degree in Geology and a Bachelor's in Education. Prior to Ziggurat, Rumi's professional experience was primarily in the education sector, K-12 and higher education. She has been responsible for Finance and Administration (F&A) since the outset. This includes overseeing activities related to F&A not only where the organization is headquartered but also across various construction sites.

Mission

“To safely deliver any project, any time, in any environment for the benefit of our customer, shareholders, employees, and the communities we serve.”

Vision

“To be the contractor and employer of choice by safely and consistently delivering successful and innovative capital projects and services anywhere in the world.”

Values

Ziggurat Developers believes that its core values drive everything it does. Incorporating these core values into their daily work, and making it an integral part of its organizational culture, is key to its future success. The Managing Director of the organization believes that their values play an integral role in solidifying who they are as an organization. The core values of Ziggurat Developers are as follows:

1. Uncompromising commitment to quality, health, safety, and environment
2. An open relationship with our employees based on mutual trust, respect, and success
3. Transparency, accountability, and discipline in our business
4. Best-in-class risk awareness
5. Integrity in all we do

Construction Project Portfolio

Ziggurat Developers over the past two-decades has collaborated with leading organizations in the country with global operations across engineering and construction, real estate, infrastructure, urban development, and management. The organization's portfolio includes construction and infrastructure undertakings from World Bank aided projects, state government, central government, telecommunications, development financial institutions, petroleum, and natural gas sector. It has undertaken and executed mid-to-large scale infrastructure projects such as earthquake rehabilitation residential settlement; underpass, bridge, viaducts, and retaining wall for a highway connecting two major cities in the western hemisphere of India; residential buildings; medical center; commercial complex; residential buildings; hospitals; captive power plant; propylene storage tank; underground tunnel; cross drainage structure; compressor house; banquet hall; podiums; and more.

Organizational Details

The construction industry is capital intensive. Very often to compete and sustain itself, an organization has to make substantial investments in various equipment and machinery. The following list is a synopsis of the various tools and equipment at Ziggurat Developers.

Table 1. Tools and equipment at ziggurat developers

Overview of Tools and Equipment			
Concrete batching plant	Tower Crane	Concrete mixers	Scaffolding pipes
Articulated dumpers	Laboratory set-up	Excavator	Concrete pumps
Tractors with trollies	Plate compactors	Theodolite	Builder hoist
Rock breaker attachment	Leveling instrument	M.S. Props	High lift pumps
Temporary Passenger Lift	Gas cutting sets	MS Spans	H-Frames

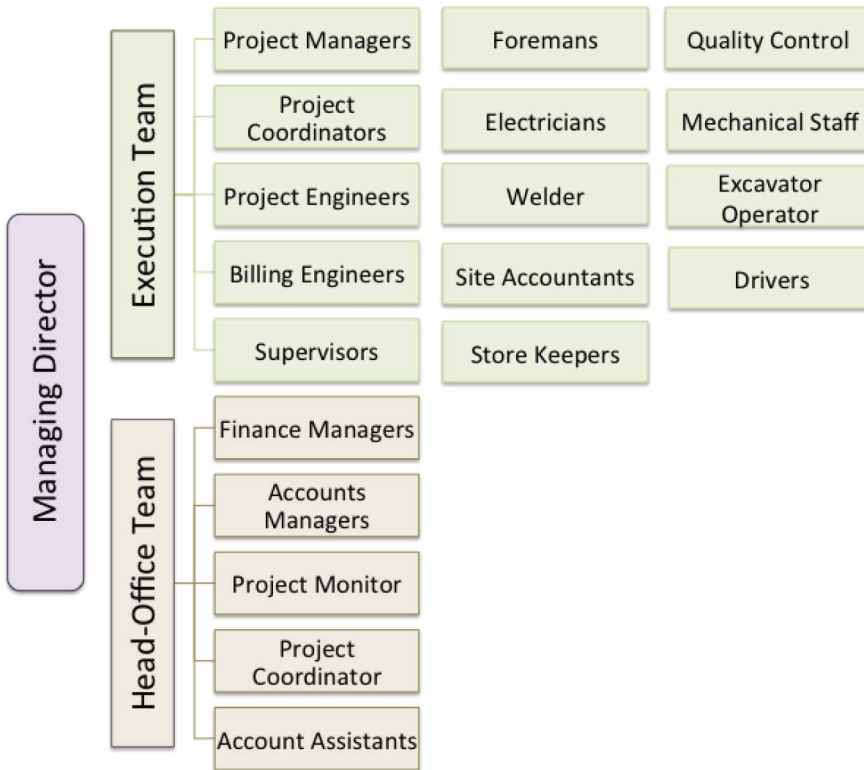
All of the tools and equipment at Ziggurat Developers are owned in multiples. After detailed financial analysis, Ajit surmised that it was prudent to invest in heavy capital-intensive equipment such as a concrete batching plant or a tower crane instead of leasing them. Thereby, making it extremely expensive to compete in the construction industry. For instance, the above table lists an Excavator; the organizations own three types of Excavators, an EX 200, an EX 70, and an EX 60. Or for example, there are 6 Theodolites, 3 Temporary Passenger Lifts, 15,000 scaffolding pipes, and so on.

Ziggurat Developers has its organization chart divided on the basis of the team at headquarters and its execution team. There is an execution team for each project and they are responsible for supervising, monitoring the project progress and quality control across various construction sites, as indicated below.

Construction Landscape in India

The construction industry in India is complex and competitive. It is highly fragmented and consists mostly of unorganized players who work on a sub-contractual basis (Indian Mirror, 2019). It is the second largest industry in India after agriculture (Indian Construction Industry, 2018) with a significant impact on the overall economic development of the country (Nihas, Barlish, & Kashiwagi, 2013). The gradual liberalization of the economy in the 1990s harbingered a flow of investments outside of India (RICS, 2011). The three segments in the construction industry are real estate, infrastructure building, and industrial construction. Real estate includes residential and commercial construction; infrastructure building consists of the construction of roads, railways, power, and so on; and industrial construction is the construction of oil and gas refineries, pipelines, and more. These segments are sub-divided into categories, for example, infrastructure building includes construction projects such as ports, irrigation, power, roads, railways, and so on (Indian Construction Industry, 2018).

Figure 1. Organization chart of Ziggurat Developers



The construction industry operates on the basis of contractual agreements (Indian Construction Industry, 2018). Over the years, different types of contracts have emerged to address special design needs, annual fund requirements, the complexity of the construction job, and so on. Subcontracting is a common phenomenon in the Indian construction industry. In subcontracting, construction projects materialize through smaller contracts depending on the size of the project, diversified, and/or specific activities that need to be completed in the project (Indian Construction Industry, 2018).

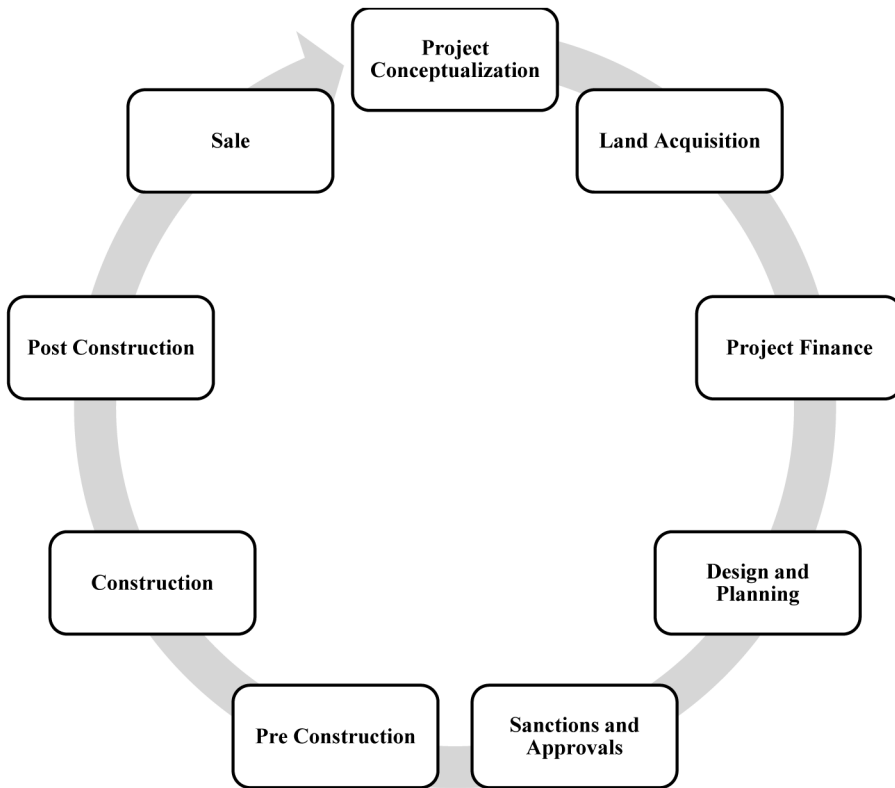
The growth of the Indian economy over the past several years has had a cascading effect on the demand for commercial property to help address growing business needs such as office spaces, warehouses, hotels, and retail shopping centers (Nihlas, Barlish, & Kashiwagi, 2013). The high growth rate of the Indian economy has been attributed to the infusion of large capital by foreign investors, growing domestic consumption, and a positive sentiment worldwide strengthened India's image of being a target for safe and lucrative investment (RICS Research, 2011).

Historical data on construction workers indicates that 80 – 90 percent of the total labor workforce consists of unskilled workers (RICS, 2011). Projections suggest that by 2020, of the 100.89 million construction workers only 5.75 million will comprise of skilled workers and 95.14 million will consist of semi and unskilled workers (RICS, 2011). Reports postulate that there are 30,000 contractors in the organized sector that handle medium to large contracts and 120,000 contractors in the unorganized/ unregistered sector typically handling small to medium work volumes (Global Insight, 2009; Planning Commission, 2012 as cited in Nihas, Barlish, & Kashiwagi, 2013).

The following figure 2 is a depiction of the real estate and construction project lifecycle. In real estate projects if the project lifecycle culminates into leasing instead of a sale then other activities such as facilities management would also feature as a key activity within the lifecycle.

There are several deterrents that cause delays during tendering and the various construction stages. Data from various government and industry report suggests that construction projects suffer from 20 to 25 percent overruns in time and cost (Nihas, Barlish, & Kashiwagi, 2013). In a McKinsey report on the infrastructure practice in India, findings highlighted the impediments that hamper infrastructure implementation during the tendering phase are the poor quality of planning and engineering design, the pre-tendering approval process is slow and centralized, and often the contracts in use are inappropriate (Gupta, Gupta, & Netzer, 2009). These challenges affect the viability of the projects, delaying implementation. The construction phase is confronted with delays in land acquisition, ineffective arbitration methods with long drawn out disputes often lasting 3 to 10 years, weak performance management ranging from reduced transparency to absence of clearly defined consequence, and insufficient availability of skilled and semi-skilled manpower (Gupta, Gupta, & Netzer, 2009). The report further highlights that despite instances where organizations have matured from small, unorganized contractors to large, well-organized construction firms, skills gaps still exists. Notably, the gaps are weak risk management skills, below-par design, and engineering skills, limited procurement practices, and nascency in lean construction principles (Gupta, Gupta, & Netzer, 2009). Nihas, Barlish, and Kashiwagi (2013) have noted the issues encountered in the construction industry due to performance issues caused due to the workforce, improper planning, and mentality wherein the selection of contractors has been based solely on the bid price. This approach of the selection of the lowest bidder has led to failed and unsuccessful projects across multiple sectors in construction (Nihas, Barlish, & Kashiwagi, 2013).

Figure 2. Real Estate and construction lifecycle (adapted from RICS, 2011, p.51)



It cannot be ignored that infrastructure is a key driver for the economy. The Indian Government has come up with a single window clearance facility to accommodate for speedy approval of construction projects (IBEF, 2019). It is currently a key focus area of the government with a budget allocation of US\$ 63.20 billion to infrastructure (IBEF). Other pertinent highlights that will act as an impetus to develop infrastructure in India are depicted in the following table.

SETTING THE STAGE

Although Ajit Das’s skills in the area of civil engineering were advanced, considered a subject matter expert (SME), and lauded for his technical knowledge over the years spanning his career but being an entrepreneur he found his knowledge and skills in finance inadequate. His next challenge came from the capital-intensive

Table 2. Snapshot of the infrastructure sector of India

Snapshot of the Infrastructure Sector of India	
Demand	India requires an investment of US\$ 777.73 billion (INR 50 trillion) by 2022 to have sustainable development
Policy Support	“Housing for All” and “Smart City Mission” will direct the growth of the sector.
	Policy to increase private sector participation has led to the increased entry of private players and to the formation of the public-private partnership (PPP) model.
Government Initiatives	To increase the capacity of the Green Energy Corridor Project along with wind and solar power by committing to US\$ 648.75 billion (INR 4,200 crore).
	Allocation of US\$ 1.55 billion (INR 10,000 crore) for the telecom industry.
	Government has invested US\$ 31.81 billion (INR 2.05 lakh crore) for the “Smart City Mission”. 100 cities in India were selected as of June 2018.
Investment	Private equity and venture capital (PE/VC) investments in the infrastructure sector was at US\$ 1,827 million during the period of January - November 2018.
Source: IBEF (2019)	

nature of the construction industry; Ajit Das had insufficient funds to run Ziggurat Developers. To overcome this fundamental problem, Ajit opted for an overdraft and Bank Guarantee facility. This banking facility proved to be adequate to fund Ziggurat’s existing business activity from the period of inception, 1993, up to the year 1997. The firm enjoyed success in its initial years and had an average annual growth rate of 50 percent. The profit accrued from the business was directed to the purchase of tools and equipment in order to minimize Ziggurat’s reliance on rented machinery. This strategy was adopted to improve the organization’s profitability in the long run. However, these heavy capital expenditures had severely compromised the liquidity under adverse business conditions.

In order to gain a reasonable foothold in the competitive construction market, Ziggurat Developers opted to collaborate with a couple of large established construction companies who were executing big industrial complexes and infrastructure projects to work as their sub-contractor. By this time, 1995 – 1996, Ziggurat Developers had already worked as a sub-contractor for Lima Construction and Sierra Inc., global leaders in construction with sophisticated innovation and engineering prowess. Ziggurat had completed numerous works and received appreciation from its clients for quality work and timely completion earning the company a certain repute not easy to come by in the complex fragmented construction industry in India.

Sierra Inc. had just commenced construction of the world's largest grass root refinery project in a city 800 kilometers away from Mumbai in 1997 - 1998. Lima Construction immediately approached Ajit Das to work for them as their sub-contractor to undertake construction as Ziggurat Developers had done in the recent past. While discussions were in progress with Lima Construction, Sierra Inc. also contacted Ziggurat Developers because of their experience with the firm in a previous project and offered the opportunity to work as an independent contractor for the forthcoming refinery project. Sierra Inc. had the reputation of being a hard taskmaster and appointed Delta Corporation to represent the interest, integrity, and reputation of the firm as its Project Management Consultant (PMC). After investigating and assessing Ziggurat Developers' capability independently, a contract worth INR 600 million was awarded. The scope of the work involved site development, grading, various plant buildings, pipe racks for the piping network in the refinery area as well as the corporate guesthouse, medical center, and water treatment facility in the township.

The existing banking facility was inadequate for a project of this magnitude and Ziggurat Developers decided to increase their manpower, equipment, along with enhanced banking facility including a loan for equipment. In order to complete the scope of work outlined in the contract, Ziggurat engaged in an extensive recruitment drive to employ engineers, foreman, accountants, operators, mechanical, and electrical staff. The project from Sierra Inc. had work fronts that were scattered over a very large expanse and each work front required an experienced engineer to head it. To support the new intake of employees, few key personnel from Ziggurat's head-office were transferred to the construction site located 800 kilometers, approximately 500 miles, away from Mumbai. The work started on all work fronts with the new team along with the new additional equipment. This was done so that the work could continue on all critical work fronts day and night in two work-shifts as required by the client, Sierra Inc.

During the same time in 1999, another refinery project promoted by Alfa Oil Inc. had just commenced construction. Ziggurat Developers was enjoying a reputation of continued success and credibility in complex construction environments with difficult clients. Alfa Oil Inc. is a huge conglomerate with diversified business interests across multiple sectors in engineering and infrastructure with some of the largest refinery sites in the country. The construction team from Alfa got in touch with Ziggurat to undertake the construction of various

Works, which included site development, grading, plant buildings, firewater basin, firewater pump house, and a residential colony. The value of the contract was in excess of INR 450 million.

A Decade's Worth

Ziggurat's team at Sierra Inc.'s refinery project was in full swing and there was no spare resource available to transfer to Alfa's site, which was only 22 kilometers away. Ajit Das again approached his bank for an additional facility. In order to support the contract from Alfa Oil, new recruitments and investments for additional equipment were made yet again. Ziggurat now had two massive undertakings 800 kilometers away from their headquarters, two refinery projects with two globally respected organizations 22 kilometers apart.

CASE DESCRIPTION

Work at Alfa's refinery started in early 2000, but within a few months, Alfa started to default on their payments to Ziggurat. Alfa started off by releasing only a part of the payment initially but later on, they were unable to release any payments and decided to issue post-dated checks. These checks were dishonored at the bank and Alfa stopped issuing post-dated checks. Instead, they started to issue certificates of a discounted bill that was payable after six months. These financial instruments were handed to Ziggurat Developer's bank. The bank released payments to Ziggurat and they were able to continue with the project.

After another six months, Alfa Oil Inc. disclosed that no funds were available with them. However, Alfa did not issue any communication to stop work nor did they give any direction to vacate the construction site. Due to contractual stipulations, it is pertinent to underscore that Ziggurat Developer was unable to simply vacate the site in the absence of non-payment and absence of communication to vacate the site from the client. This resulted in Ziggurat's continued stay at Alfa's construction site with no work and no payment. Thus, the expected return from this undertaking was now nonexistent. Ziggurat Developers had sacrificed its financial liquidity and in turn, its very survival since the long-term refinery project was considered prestigious and on completion, it would be regarded as one of the largest refineries in the world. Thus, the construction of the refinery project came to a complete halt that resulted in the idling of Ziggurat's resources such as its technical team of 80 engineers, plant and machinery, and 700 workers.

Financial Challenges Facing Ziggurat Developers

The ongoing challenges faced by Ziggurat at Alfa's construction site were exacerbated when a severe cyclone hit the project site demolishing all offices, labor colony, and onsite facilities. Any monetary surplus was used partly to repay the bank loan and the remainder was directed towards payment and maintenance of an idle establishment at Alfa Oil Inc.'s site.

Ziggurat Developer faced yet another setback. The organization now learned that all the discounted bills from Alfa were dishonored by their bankers and Ziggurat was now exposed to a huge financial liability. Although the bank had supported Ziggurat in several ways due to relationships that Ajit Das had formed over the years with the banker, the bank was now required to close down Ziggurat's account as per guidelines from the Reserve Bank of India (RBI) and initiate legal proceedings against Ziggurat Developers to recover their dues.

Now faced with another set of challenges from the financial institution, Ziggurat Developers entered into an agreement with the bank. The agreement was to pay off a lump sum within a specified period. The agreement was compiled by Ziggurat subsequently when the organization's financial health had improved.

Management and Organizational Challenges Facing Ziggurat Developers

In the absence of banking support, liquidity available at Ziggurat Developers now stood at zero. The project had led to the hiring of 80 engineers and other staff in technical and mechanical areas. In the next four months, with no signs of the project restarting in the immediate future, the organization went through its second round of lay off to reduce its overhead costs and laid off 60 employees from its technical team of 80 engineers. The core of Ziggurat Developers now consisted of 20 engineers and all of its plant and machinery that remained dormant and inoperational still remained onsite. Ziggurat was forced to maintain this non-revenue generating infrastructure for the next year-and-a-half because the terms of the contract stated that the site could be vacated only when the client issued a written statement, which is considered a norm in the construction industry in India.

Ziggurat redirected its funds from all other existing construction projects that were rather small in scope and contractual value in order to maintain and sustain the refinery project. This had resulted in unpredictable payment for its employees located at the headquarters. In the initial years since the formation of Ziggurat Developers, it had earned the reputation as an organization with very high employee retention,

A Decade's Worth

boasting of an employee turnover rate at 3 percent, well below the norms of the construction industry. However, during the refinery project phase from 1999 – 2004, the employee turnover rate now stood at 80 percent.

The organization by now had reached a point when it was unable to ensure the maintenance of its vast collection of tools, machinery, and equipment procured with an objective to execute and complete the refinery projects. Ziggurat now began to sell some of its equipment to arrange for the much-needed liquidity. The sale proceeds from the equipment were used to remunerate the staff and to manage other overhead expenses such as electricity and taxes. The fiasco with Alfa Oil Inc. and the ensuing set of multiple challenges had made Ziggurat Developers vulnerable and it became desperate to secure new contracts.

Ziggurat Developers was now faced with no offers to develop or collaborate on any infrastructure projects due to an absence of liquidity. In addition to this, the firm was now also faced with high financing cost, lack of banking support and non-cooperation from vendors to supply construction material since news of Ziggurat's weak financial standing as a direct result of the refinery project with Alfa Oil Inc. had spread. Due to its non-availability of funds, Ziggurat Developers dealt with skepticism from clients in its ability to undertake a construction project, not because of the firm's lack of technical expertise and construction knowhow but its inability to mobilize a project team on site.

Due to their expertise, Ziggurat Developers secured a few contracts in the infrastructure sector. However, they now had to work as a subcontractor, who was in a distressed state due to his collaboration with construction giants in the country. Thus, the contracts that the organization now executed had a low contractual value. The influx of money from these contracts could only cover Ziggurat's regular overheads. The profit was notional that kept the organization afloat in light of extreme financial adversity.

Since banking support was withdrawn, it became difficult for Ziggurat Developers to open a new account with another bank. To overcome this problem, Ajit and his spouse Rumi started another construction company, Zulu Inc. This strategy enabled Ziggurat Developers to successfully open an account at another bank after almost one year. Business continuity was ensured through the formation of Zulu Inc. in 2003. Several corrective measures were required to be enforced since Ziggurat's involvement in the refinery projects to now secure the stability and growth of Zulu Inc.

SOLUTIONS AND RECOMMENDATIONS

The refinery project debacle with Alfa Oil Inc. was a lesson in systems analysis and systems thinking. Systems thinking helps a person view systems from a broader perspective that includes seeing overall structures, patterns and cycles in systems, rather than seeing only specific events in the system. It helps to identify the real causes of issues in organizations so one knows what and where to work on in order to resolve them (McNamara, 2005). It is important to underscore that the several challenges that Ziggurat faced over the next decade were not only an unveiling of the extent of the damage an issue can have on the entire functioning of an organization but also the number of issues that rose from the unplanned ad hoc expansion of Ziggurat Developers. Given the financial state of Ziggurat Developers and its financial obligations to the bank, Ajit's primary objective was to keep the organization afloat. Thus, the road back to performance was anything but circuitous, layered, and complex.

As a direct result of the refinery project with Alfa Oil Inc. Ziggurat Developers had to overcome upheavals for the next 10 years to turn the organization around and bring it to some semblance of stability, regain its lost market credibility, and growth. The credibility that Ziggurat now had to mend was in its ability to retain employees, successful execution and completion of projects, available funds to kick off a new construction project, reassure vendors in the organization's ability to pay for construction materials such as steel, cement, and so on, all of which require an upfront payment to the various suppliers.

Among its many learnings, going forward the organization would now only bid for construction projects that were required to be executed within Mumbai's city limits. The next lesson was around people management and team building. Ziggurat had hired 80 engineers and technical staff and support employees within a few weeks and had all of them relocated to manage two of the most prestigious, complex, and largest construction projects 800 kilometers away from its headquarters. The newly recruited team was unaware of the organizational culture and Ziggurat's core principles of integrity and uncompromising in its quality of work. It realized that reassigning 80 engineers was a mere congregation of a talented technical team with no assimilation into the work culture at Ziggurat. The organization was new to managing two projects of such magnitude away from the headquarters, which directly translated into reduced direct supervision of Ajit Das under whose professional reputation and credentials the refinery projects were awarded. A construction project has a plethora of variables that need to be rightly managed. It includes a

A Decade's Worth

detailed costing along with a list of construction items, followed by a request for proposal from various vendors who would meet the cost, quality, terms of delivery and payment criteria. Once the vendors for each construction item were finalized, quality controls and checks of construction materials are of utmost importance to ensure the quality of the work being done. Finally, it also includes the disciplined upkeep and maintenance of machinery and equipment.

The distance compromised on Ajit's exacting standard of quality. Since the organization was still in its nascent stages, its monitoring system was also in its initial stages. With the large scope and contractual value of the refinery projects, a huge relatively unknown team was made accountable for prestigious projects. It is common knowledge in the world of construction that thefts are a regular occurrence. Some speculate that anywhere from 30 – 85 percent of construction theft results from someone the organization has granted authorized access to the site (White, 2019). This was true for Ziggurat Developers too. The organization was confronted with fictitious bills as a result of collusion between employees from Ziggurat and Alfa Oil Inc. This resulted in an overhaul of the system of checks and balances at Zulu Inc. Since the formation of Zulu Inc. construction expenses from the site were now compared against quantity and cost projections at the head-office in addition to the quality checks conducted at sites. For example, if a vendor supplied a bill for a certain quantity of cement, the site engineer would first check it for quality and quantity against Zulu's specifications. Any discrepancies in the quality, quantity, or price of the cement would first be sorted out among the various engineering teams at the head office and at the construction site. Only after this stage would a request for payment to the cement vendor be sent to the accounting department.

Ziggurat Developers also learned a hard lesson regarding the upkeep of its tool, machinery, and equipment. Due to its financial crunch, the organization was forced to sell its fixed assets. Unlike land holdings, equipment is a depreciating asset, and with an idle construction site for a year-and-a-half led to the decay and inoperability of their tools and machines. When Ziggurat had to sell their equipment it did not receive the sale price it would have otherwise received i.e. the sale of tools and machinery from an active construction site. The idling of tools and machinery in an open construction site subject to heat and rain coupled with the absence of a mechanical and technical team dedicated to its regular maintenance. The circumstance exacerbated the deterioration of the firm's assets thus affecting the sale of assets that had warranted a heavy capital-intensive investment from Ziggurat at the time of procurement.

Ajit Das recognized and learned the hard way that Ziggurat's expansion should have been a planned endeavor replete with an in-depth understanding of the firm's existing capability and capacity. The lesson here was to understand the pace of an organization since an ad hoc expansion imposes a strain on the organization's existing resources. The workforce talent, working capital, fixed assets, and processes at Ziggurat were geared to address the successful execution of construction projects of a certain magnitude, in its scope and inherent complexity. An expansionary effort by an organization is a test for its structure, people, processes, disbursement of funds, billing, quality control, and so on. In the case of Ziggurat, undertaking two of the largest refinery projects in the country, it made several leaps in the scope of work and complexity particularly for an organization still in its early stages of growth. Thus what the organization witnessed was the various foundations such as people, process, structure, systems, and so on were underdeveloped and ill-equipped to match the expansion efforts of Ziggurat Developers. These lessons have served Zulu Inc. in its capacity building for expansion since 2007.

Ziggurat Developers accepted nominal subcontracting work in real estate with low-profit margins to manage its overheads. In the newly formed company, Zulu Inc., with a minimal surplus, it learned how to effectively manage operations and costs at a site without compromising on quality and integrity of the construction project. Due to Ajit's sophisticated technical expertise and know-how, his and his team skills were now available at a competitive price. Real estate developers lapped at the opportunity and enlisted Zulu's team to execute and complete complex commercial projects such as malls, office, and residential buildings. This led to the rebuilding and rebranding of Zulu Inc.

Availability of funds plays a pivotal role in the construction industry in India and Ziggurat Developers had experienced first hand what lack of liquidity can do to a business. The downward spiraling vicious cycle Ziggurat found itself it took a decade to recover from and nurse the organization back to health in terms of stability, growth, resilience, dependability, refined system of checks and balances, and maturity. In India, in Ziggurat's experience, construction projects were hard to come by not because of one's lack of technical sophistication and know-how but because potential clients will not even consider a contractor with no cash to mobilize resources to a project site. As Ajit says, "To build healthy cash flow for business operations takes time. And, as a technical professional, I certainly was not savvy in financial matters. One has to remain alert and careful in deciding the quantum of financial exposure with banks. Banks are known to take away your umbrella when it rains".

A Decade's Worth

Since the formation of Zulu Inc., one of the tools to evaluate the cash flow in the organization has been to compare the estimated cost of labor and material against the quoted price for labor and material against the actual cost for labor and material. The quoted price is the figure that is presented to the client and the estimated cost calculations occur during the project-planning phase and the project monitor at the head office in consultation with Ajit Das proposes the project estimates. The accountant located at the head office is responsible for calculating the actual cost of labor and material across various construction sites. Ajit now uses these three data points to assess and monitor the scarcity or surplus of cash flow within the organization. For instance, Ajit now has estimates for fuel consumption across sites and if there is an aberration in the actual versus the estimates and the quoted, site engineers are called in for an inquiry. Embedded within all of this learning, is a deep explicit and tacit understanding of the cyclical nature of his industry, construction. Ajit now typically has a mid-term plan, for a period of 8 - 10 years, to ascertain the growth curve. In addition, there are contingency plans to ensure the organization is exposed to minimize damage during a downturn. In the worst scenario, Ajit's advice is to remain afloat until business tides are favorable.

Zulu Inc. has a few beyond-the-box management philosophies; here is one that Ajit attributes to his mentor, he states:

You do not try to nullify the theft on your construction site, you can never do it. There are far too many opportunities to pilfer, vast quantities of construction material lying around in the open spread across an enormous area, and many people. It is humanly impossible to monitor every screw, sand, cement, lumber, gravel, wire, pipes, rods, brushes, nails, rivets, and so on. There is wastage on site, at times work has to be redone, and in the midst of all of this to monitor purloining on your construction site is a herculean task. To start questioning and asking your team and every construction worker – there are hundreds of skilled and semi-skilled workers, I may find myself doing just that all day! It is not productive and a complete waste of time. If you think someone is going to own up to stealing 500 nails on a Thursday, and a paintbrush on a Monday – then you have a very naïve understanding of a construction site and this mindset is actually a deterrent and it will prevent you from getting the actual work done. Furthermore, you may inadvertently demoralize an honest core team member. My mentor is a genius in civil engineering; he has had several accomplishments to his name and was a Managing Director of a global engineering firm with long-standing repute and held that position for a very long time. I had

trained under him for the first decade of my career, my mentor had advised me to always assign a 'figure that a construction site was allowed to purloin' and focus on controlling that number. For instance, my allowance for my construction sites range from 15 – 20 percent, and I focus on not letting the thefts on a construction site exceed that allocation. It is not a number that is broadcasted across Zulu Inc. but it is a thumb-rule my spouse and I now follow.

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KEY TERMS AND DEFINITIONS

Civil Work: Implies an organization that engages in construction and infrastructure.

Indian Rupee (INR): Is the official currency of India.

ENDNOTE

- ¹ In discussions around contract value, expenditures, and losses, the currency of the country, India, INR has been retained. Historical currency exchange rates to the U.S. dollar during the period of the case study, late 1990s, have been refrained from. In 2019, the U.S. dollar to INR is roughly US \$1.00 is approximately INR 69.44. Due to fluctuations in the foreign exchange market, exchange rates differ on a daily basis. To give the reader a perspective in the 1990s, the conversion rate of the US \$1.00 was roughly between INR 35.00 to INR 40.00.

APPENDIX: QUESTIONS FOR DISCUSSION

1. What are your key learnings from the case of Ziggurat Developers now operating as Zulu Inc.?
2. What could Ziggurat Developers have done differently to reduce its recovery period from 10 years? What criteria have you used to distill down to your preferred recommendation? [Note: Assume that Ziggurat Developers did undertake the refinery construction projects].
3. As a practitioner of performance improvement, what are the indicators of critical business activity within your industry that has started showing signs of a downward spiral? Develop a plan to mitigate and control for each of these indicators [Consider critical activities such as an expansion, merger, new business process, team development, and so on].
4. How does this case study influence or alter your understanding of what your team members ought to bring to the table? Does your organizational culture support and encourage this altered understanding? If not, list and discuss the various deterrents.
5. What are the components of your contingency plan? How often are you updating your contingency plan? If you are, discuss the shifting nature of your contingency plan.

Chapter 11

Improving Classroom Management and Teacher Retention: A Needs Assessment

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EXECUTIVE SUMMARY

This case explores how a needs assessment was conducted at a middle school experiencing high rates of teacher turnover. Pamela Frost, an experienced instructional designer, was assigned to assess the situation and identify opportunities to improve professional development opportunities for the teachers. As a part of a needs assessment, Pamela gathered data to address needs pertaining to classroom management challenges, teacher attrition rates, and establishing relations with the local community. This case explores how Pamela gathered data and triangulated her findings to determine what interventions were needed.

DOI: 10.4018/978-1-7998-0054-5.ch011

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ORGANIZATION BACKGROUND

Pamela Frost, an experienced teacher of 22 years, was not quite sure where to start when walking into Miller Middle School. She had recently been hired to lead programming initiatives for the professional development of the Miller Middle School's teachers. The school located in an urban city had been experiencing a record number of turnover amongst its teachers, averaging 47% every year for the past 10 years.

Miller Middle School is located in a metropolitan city and is made up of 800 students (48% female, 52% male), 40 certified teachers, one principal, three assistant principals (one for each grade level). Additional support staff includes 2 guidance counselors, 2 literacy coaches, 2 math coaches, a media specialist, a school psychologist, 1 part-time speech pathologist, 1 school nurse, and 25 non-certified staff including teacher assistants, cafeteria workers, and custodians/bus drivers.

The student body demographics are 40% Caucasian, 40% Hispanic, 15% African-American, 4% mixed race, and 1% Asian. A total of 70% of the student body receive free or reduced lunch at Miller Middle School. The percentage of proficient students with regard to standardized testing is alarmingly low (Table 1). Sadly, these numbers are not far from the rest of the state. On average, that are 15 students per day who serve an in-school suspension.

During her first week, Pamela met with Bryson Jackson, the school's principal. Bryson explained to Pamela that the school board was asking each school in the district to appoint a teacher who would be responsible for leading professional development programming that was customized to meet the needs of the teachers. The school district was still requiring teachers to participate in mandatory professional development activities, but they were charging schools with developing new programming efforts. The goal was to have teachers participating in 50% district-led initiatives and 50% customized initiatives.

Table 1. Percentage of proficient students in accordance with state standards

	6th Grade	7th Grade	8th Grade
Math	41%	29%	29%
Reading	53%	45%	58%

Improving Classroom Management and Teacher Retention

Pamela had spent the first two weeks in her new position reviewing school and district policies and reviewing the previous professional development opportunities that had been made available by the district. Before proposing what modules should be eliminated, revised, or created, Pamela knew that it was in her best interests to conduct a needs assessment to fully understand the needs of the teachers in Miller Middle School. With an annual turnover rate of 47%, Pamela wanted to better understand what was causing teachers to leave the school, and whether the professional development efforts that she was now responsible for could eliminate the high turnover rate.

During her meeting with Bryson Jackson, Pamela explained to him that she thought it was important for her to develop a better understanding of the unique needs of the school by conducting a needs assessment. She wanted to learn more about the teachers and the students to help her identify professional development opportunities that would be perceived as valuable by the teachers. A teacher with an advanced degree in instructional design and technology, Pamela felt confident that should develop lessons and workshops to train teachers on a variety of technology integration strategies and applications. What she was not quite sure of was whether these types of interventions would really help address the challenges occurring at the school.

SETTING THE STAGE

After meeting with the principal, Bryson Jackson, on several occasions to discuss her new role within Miller Middle School, Pamela met with the administrative team consisting of Bryson and his three Assistant Principals, John Sven (6th grade), Matthew Palmer (7th grade), and Sheri Flax (8th grade). All three assistant principals had significant experience teaching middle school grades and had been with Miller Middle School since 2008. Each was responsible for overseeing the day-to-day operations for the individual grade levels and coordinating with the administrative team in regard to improving teacher retention and strategic planning.

Pamela had called a meeting with the administrative team to identify the specific needs that they wanted her to prioritize for her first year in her new position. While Pamela had some ideas of what she thought they should address, she wanted to be mindful of the fact that the administrative team had been at Miller Middle School for a long time and were more familiar with day-to-day operations, policies, and challenges faced by the teachers.

Bryson opened up the conversation, “It’s plain and simple. Teachers would be more inclined to stay if they didn’t have so many headaches in the classroom. Newly graduated teachers accept positions at our school and realize after the first three months that this is not the environment they fantasized about in college.”

Sheri added, “The challenge is that we have such a hard time holding onto good teachers. When we recruit new teachers out of college, we don’t have many senior teachers that we can assign to them as mentors. I don’t think we’re providing sufficient support to them. I don’t think that any of them have been trained to deal with the magnitude of disciplinary issues in the classroom. There is so much disruption that they spend most of their time trying to diffuse confrontations and student interruptions, that they don’t get to spend enough time on teaching content.”

Pamela shook her head in disbelief. During her orientation, Sheri had given her a tour of the school. During that time, they sat and observed several classrooms in session. Pamela experienced, first-hand, the challenges that the teachers were encountering in the classrooms. “How are these classroom disruptions being communicated to the students’ parents?” she asked.

Bryson shared, “Any time there is a disruption with a student in the class, the teacher is asked to write a report that summarizes the incident. This is then filed with our office and placed in the student’s file. The teacher then notifies the student’s parents through our online School Portal. The portal is where parents can access notes from teachers, view their child’s progress, and any homework that has been posted. There are several functions on the portal where parents can communicate with the teachers directly, set up meetings, if needed.

A big concern of ours is that many of the parents are not accessing the portal. When we notify them that their son or daughter is being suspended, the few that do reply are more concerned with who is going to watch them during work hours. Because we’ve had such a high number of suspensions, we’ve had to create “in-school suspensions” to address this issue as well as try to prevent the students from missing too much school.”

Pamela asked, “How do you think any of the current professional development opportunities, offered by the district are helping your teachers manage these challenges in the classroom?”

“They’re not,” retorted John and Matthew in unison. Matthew continued, “We used to hold professional development workshops on designated P.D. days identified by the district. These were typically early release days for the students and our teachers would participate in training to collect their CEUs. We were responsible for keeping attendance logs and reporting to the district office on a quarterly basis.

Improving Classroom Management and Teacher Retention

Recently, the district has tried to offer some opportunities like online courses so that teachers were not limited to the early release days. We are faced with two challenges. First, there are now so many opportunities for teachers to earn CEUs that it's unclear what is required and what is optional. Every month, the district seems to add additional "required" modules in addition to the bunch that the teachers are already completing.

The second issue is that the teachers keep reporting frustration with how to keep track of the CEUs they are earning. If they complete modules online, they are expected to them submit a completion report through the district's portal. This isn't tracked for them. If they participate in an early release day workshop, we have to maintain written logs of attendance. If they attend a professional development program outside of the district, they have to report that to the district office electronically and by paper. It has become unclear in recent years what is considered a 'CEU opportunity.' If I remember correctly, our teachers were required to complete a combination of 50 modules and workshops totally 120 contact hours. That's more than what they would need to renew their state license over the course of a five-year period. Even after they report their course participation, there's no repository for the teachers to access to see what they have completed and what is still outstanding."

Pamela replied, "It sounds like there are logistical challenges every which way you turn. It would be helpful for me to further investigate some of the issues you've mentioned today. I'd like to try and wrap my head around understanding what's causing some of these issues and whether there is anything we can do to alleviate some of the challenges that everyone has been facing. This isn't an ideal situation for your team, the teachers, or the students."

She continued, "If you had to pick, what are the top three issues you would like for me to try and address in my first year?"

"The student discipline is extremely out of hand," said Bryson. "There is a huge issue with disrespect. Students not only disrespect teachers and administrators, but they also disrespect themselves." Bryson shared that presently 20% of students initiate disruptions. "That means that every class has roughly two students who completely distract teachers and disrupt the learning of others."

Sheri interjected, "Our main goal in terms of the professional development of our teachers is to make teachers better by building on their individual talents. I really think that if student discipline issues could be resolved, our turnover rate of 48% would decrease."

Matthew shared, “It’s imperative that we focus on identifying ways in which we can change the culture of the school to aim for higher standards. The teachers need to have higher expectations for their students and they need to have higher expectations for themselves. The community expectations needed to be increased as well. The community should think highly of the school and be more connected.”

Pamela was vigorously writing notes in her notepad. At the end of the meeting, the administrative team and Pamela agreed that her needs assessment would focus on addressing the following three needs:

1. The decrease in Student Discipline Issues
2. Strengthen Teacher Capacity & Increase Teacher Retention
3. Strengthen Community Connection/Involvement

CASE DESCRIPTION

The purpose of this project was to conduct a needs assessment to address a large number of student discipline challenges in a mid-Atlantic middle school. Upon speaking with administration, it became apparent to Pamela that teachers’ time was being consumed with classroom management and behavioral issues. Her needs assessment focused on addressing three priority needs for the school: 1) decrease student discipline issues; 2) strengthen teacher capacity and increase teacher retention, and 3) strengthen relationships with the local community.

The issues identified by the school administrators were escalating and impacting other areas of student performance. By conducting a needs assessment, Pamela was better positioned to validate and prioritize the needs (Altschuld & Kumar, 2010; Peterson, 2004) and make recommendations that would take into account the systemic implications.

During initial meetings with the principal, Bryson Jackson, and his administrative team, it was reported that 20% of students in the school were initiating class disruptions. The continued disruptions were distracting the teachers and interfering with the learning of others. The nature of disruptions involved students disrespecting teachers, administrators, and their peers. It was also reported that the average annual turnover rate for teachers at the school was approximately 48%. Bryson was hopeful that if student discipline issues could be resolved that the turnover rate would decrease.

A third area to be explored during the needs assessment involves strengthening community relationships with the school. Many of the students participated in after-school programs hosted by local non-profit organizations. Pamela chose to explore the existing relationships between these programs and the school in an attempt to

align recommended interventions in order to provide students with a consistent message regarding expectations of their behavior.

Pamela used Witkin and Altschuld's (1995) three-phase needs assessment model to guide our needs assessment. She chose this model as it allowed her to approach the identified needs from multiple lenses and address the needs of multiple constituents. Data was gathered from multiple sources to allow for triangulation (Lee, Altschuld, & White, 2007; Peterson, 2004). Furthermore, the model promotes a layered approach to needs assessment to help refine and validate needs and align appropriately with suggested recommendations (Altschuld & Kumar, 2010).

Project Objectives

In order to ensure alignment with the needs expressed by the administration of the middle school, the data Pamela would be collecting, and recommended solutions, performance objectives were identified for each need. The purpose of this was to help Pamela maintain focus as she conducted the needs assessment (Altschuld & Witkin, 1999; Hunet et al., 2002). Objectives for each of the three performance needs are described in Table 2.

Recognizing that there were multiple stakeholders involved that would be affected by recommendations made as a result of the needs assessment, Pamela wanted to make sure that she had an opportunity to engage with all of the constituents. This would help ensure that their individual needs would be taken into account as she gathered data and began to analyze what was causing some of the challenges expressed by the administrative team.

Table 2. Needs assessment project objectives

Need 1: Decrease in Student Discipline Issues
<ul style="list-style-type: none">● Analyze the cause of the discipline problems● Collect specific data through student focus groups● Ensure all teachers have set behavior expectations and consistent consequences● Ensure that punishments presently set in place are effective and not simply a way to move the student into a different area of the school● Research and suggest alternate activities for disruptive students
Need 2: Build Teacher Capacity and Increase Retention
<ul style="list-style-type: none">● Analyze the cause of the problems● Meet with professional development director for our school system to inquire about opportunities for our teachers to grow and improve
Need 3: Strengthen Relationships with the Local Community
<ul style="list-style-type: none">● Survey the teachers asking for community involvement ideas● Research community connection projects for students

As Pamela pondered over the project objectives to further examine the three identified needs, she was mindful of the need to triangulate any information that she would be gathering to better understand the situation at Miller Middle School. With the support and encouragement of Bryson and his team, Pamela began developing data collection tools to assist with gathering the necessary information.

Understanding Teachers' Perceptions

Pamela developed a survey to administer to the 40 certified teachers who were currently working at Miller Middle School. As she crafted the questions asking for the teachers to share their perceptions regarding student disciplinary issues in the classroom, the need for professional development for teachers, and current relations with the community, she was mindful that she wanted to allow the teachers to speak openly and honestly. In order to accomplish this, Pamela ensured that the survey could be completed anonymously. She did not want to bother the teachers with additional work during school time, she sent out an email prior to the survey to ask for their participation and explaining the purpose of her needs assessment. She clarified that the survey would not automatically result in students with behavioral issues being removed from their classes. She also made sure to assure the teachers that the results of the survey would add to their existing workload.

The main purpose of the survey was to obtain a general, overall picture of possible “hidden needs” or to justify the stated needs expressed by Bryson’s team. Pamela wanted to explore the larger picture pertaining to just how many students disrupt classrooms, how much support teachers actually receive, teachers’ priorities, and some major issues such as administrative effectiveness. Additionally, she solicited responses from the teachers to get an idea regarding what type of community connections they would like to see as well as any suggestions they might have to offer. With regard to building teacher capacity, Pamela was extremely curious to find out in just how many professional development opportunities the teachers had participated and if they were even effective. Due to some of the discrepancies between the teacher responses, Pamela decided to conduct a few follow-up interviews to get a better understanding of their situations.

Conducting Focus Groups With Students

Pamela knew that it was important for her to meet with students to hear their thoughts regarding the challenges around teacher turnover and classroom management as they were directly affected. In order to better understand the root causes of some of

Improving Classroom Management and Teacher Retention

the classroom disruptions, Pamela conducted focus groups with students who were causing the majority of disruptions. She also wanted to hear from students who were not involved in any of the classroom disruptions.

Pamela was careful to ensure the parents and guardians of these students were notified and aware that their child would be participating in her focus group. She received consent from most of the parents. She also made sure that she dismissed any of her own preconceived notions that the families of these children are the reason for their poor behavior. She remained focused on trying to identify ways in which the school could best support them. The following are a list of some of the questions Pamela intended to ask the students during the focus groups.

1. Do you enjoy the social aspect of school?
2. Who are three adults at this school who you feel you could approach if you needed help with something?
3. What is your favorite subject or what was it in elementary school?
4. What are your career dreams?
5. What was the last book you read?
6. Do you enjoy reading or have you ever enjoyed reading?
7. Do you feel like this school supports your needs?
8. If not, which needs do you feel are not being supported?

Exploring Current Professional Development Opportunities Available Through the District

When Pamela was hired to lead the professional development efforts for the teachers, she was already aware that there were a large number of development opportunities that were currently available to the teachers. Before she made any recommendations to eliminate any of the existing offerings or develop new lessons, she wanted to better understand the current system that was in place.

Pamela met with Dr. Sally David, the Director of Professional Development for the school district. She also met with Associate Superintendent of the school district. The purpose of these meetings was to address the current professional development opportunities offered or, judging by the teacher survey responses, the lack thereof.

CURRENT CHALLENGES FACING THE ORGANIZATION

Teacher Perspectives

Pamela was happy to report to Bryson and his team that she had the opportunity to engage with teachers, students, and community members to better understand the performance gaps and challenges that were taking place at Miller Middle School. A total of 33 teachers out of 40 completed her survey. The main purpose of this survey was to obtain a general, overall picture of possible “hidden needs” or to justify the stated needs of the client.

The results of the survey revealed that five students on average disrupt each teacher’s class each day. When students are sent to the office for a behavior issue, it is 45.5% likely the problem will persist and 33.3% extremely likely it will persist, which means the administration is not effective with regard to student discipline. Teachers are 57.7% likely to contact parents regarding a discipline situation. When teachers contact parents regarding a discipline issue, it is, on average, unlikely that the problem will be resolved. Teachers mostly disagreed when they were asked if they have autonomy over their planning time. When teachers were asked if they were given the option to choose professional development opportunities, which personally strengthen them as an educator, 9.1% strongly disagreed, 30.3% disagreed, and 24.2% somewhat disagreed. The majority of teachers strongly agreed that if there were opportunities presented, which would strengthen their profession, they would be willing to participate. 45.5% of teachers prefer professional development activities to take place on required teacher workdays. Other methods included: online and during the day with substitutes hired. None of the teachers preferred “during planning time,” when some of the professional development opportunities are offered.

The most shocking finding was that on average, teachers attended 5 professional development opportunities per year, 2 of which benefitted their own personal needs as educators. Where support is concerned, surprisingly, 48.5% of teachers agree that the parents of their students support them. 9.1% strongly agree, 57.6% agree and 18.2% strongly agree that they feel supported by the administration. This was conflicting because of the fact that the administration was “unlikely” to solve discipline problems, therefore, Pamela decided to look into this further.

Also conflicting, was the survey data showing that 12.1% of teachers strongly agree and 54.5% agree that they feel supported by the community. When asked if Miller Middle School provided opportunities for parents to connect with the school, 21.2% strongly agreed and 63.6% agreed. The majority of the teachers feel supported

Improving Classroom Management and Teacher Retention

by the instructional coaches, interventionists, and digital integration facilitator. 34.4% disagree that central office staff supports them and 12.1% strongly disagree.

The teachers did make suggestions for how Miller Middle School could strengthen their relationship with the community and improve classroom management are included in Table 3.

During the follow-up interviews with the teachers, Pamela asked them to explain how the administration does support them. The following is a summary of their responses:

- “I honestly feel it’s because the kids don’t change. When I have discipline problems it is from repeat offenders that don’t seem to learn. Admin is stepping in and doing their part. They meet with the kids. We come up with incentives however, the culprits are not doing their part to change the behavior.”
- “I feel like the principals support my decision that they are making bad choices and give me autonomy in my class, however, I don’t feel that the behavior support system for the school is effective or making a difference for the hard problem kids (of which I spend most of my time)”
- “We have set up meetings with students and created behavior contracts—that actually get followed through on.”

Table 3. Teacher recommendations for addressing project needs

Suggestions for Strengthening Community Relations
<ul style="list-style-type: none"> ● “Make conferences mandatory for parents.” ● “Parents should be required to attend a training session where they are fed and taught the expectations and ways in which they are expected to support their students and their school.” ● “Student-led community service activities.” ● “Maybe students could go out and observe various businesses.”
Suggestions for Improving School Culture and Climate
<ul style="list-style-type: none"> ● “Teachers that are lateral entry or brand new need to be given a clear and concise road map and calendar to follow. They should not have to struggle to figure out what is required or have to argue to get their accomplishments acknowledged.” ● “If we can get discipline under control and get effective leadership, then we would not have to worry about teacher retention. Our leadership is our biggest hurdle to overcome. We kind of seem to be the dumping ground for ineffective leaders that they don’t know what to do with.” ● “Building a class for the students who are known for disruptive and removing them from the students who truly want to learn. The disruptive students really don’t want to learn, so place them in a class together and let them ruin the learning for each other as opposed to ruining it for everyone else. Far too many of our students are being cheated out of the education they deserve because of disruptive students.” ● “Follow through with discipline procedures.” ● “I feel overwhelmed when it comes to parent/guardian contact. I know that I personally do not do it enough. I would like more time during the work hours to call them.”

- “Admin will let the student come to their office for a student to regroup when the student has it together enough, they are welcome to come back to class.”
- Sometimes the administrator even comes to me and asks for my opinion on what the punishment should be for the offending student.”

Supporting the Needs of Students at Miller Middle School

The purpose of the student focus groups was to compare the habits and characteristics of the students who earned the most behavior referrals in the school and the highest achieving students (both academically and behaviorally). Questions were asked to each student privately and their responses were recorded. Students were then gathered as a group to discuss future school options.

Pamela was originally expecting all the students who exhibit poor classroom behavior to make statements such as, “I don’t like to read,” “I don’t have a favorite subject,” and “I don’t know what I want to be when I get older.” Ironically, both the high achieving students who maintain excellent behavior had the same answers as the students who received behavior referrals. Every single student interviewed stated that they enjoyed reading. They even added that they enjoyed being read to. All students stated they had a favorite subject and it was either math, language arts, social studies, or science. All students stated their future dream profession. One of the female students who received a referral about every day stated her passion for becoming a pediatrician.

When Pamela asked what the school could do to better support their needs, every student in both groups stated that they would like to see more class options offered, for example, computer science/coding, a more hands-on, intense career studies course, graphic design, sports history, and mechanics. While the focus group responses do not

condone disrespectful student behaviors, but by analyzing this data, it does suggest that some of the disruptive students may be willing to work very hard to succeed if motivated.

Current Professional Development Opportunities

Dr. David’s administrative assistant stated, “Approximately 165 sessions throughout the school year are offered. School menu offerings are selected by the principal and School Improvement Team and are offered on the school site.”

Improving Classroom Management and Teacher Retention

Pamela was confused. How was it that 156 PD sessions are offered and teachers are attending an average of 5 per year? The question might not be, “Why are teachers not attending more,” but rather, “Why is the district spending so much time and money on professional development opportunities that nobody attends or benefits?”

Another major discrepancy exists among the method in which teachers may access most PD opportunities. This method is a website called Home Station. This is an extremely non-user-friendly site, which most teachers purposely steer clear of unless they need to sign off on their observations. I found that most of the PD opportunities may be accessed through this site. The other problem is that Miller Middle School’s District does have a PD site of their own, but most of the teachers do not even know where to find it. When I visited this site myself, there was not a list of exciting PD offerings or anything of interest. There is simply a list of directions explaining how to access Home Station.

The most shocking information was that this district’s yearly budget for professional development ranges from \$278,000 - \$352,000. This rose yet another red flag. Due to this discrepancy in data, Pamela decided to go a step further and meet with Dr. Mitchell Robins, the Assistant Superintendent of Curriculum and Support Services. He agreed with Pamela that the present PD System registration is not user-friendly by any means. Dr. Robins stated that PD is a mixed bag and that it is mostly managed by school administration on school-site. Additionally, countywide PD is usually not mandatory.

When Pamela presented her concerns regarding professional development to Dr. Robins, he showed her a website that he is trying to persuade the district to purchase. It is called mylearningplan.com. The purpose of the site is to offer staff professional development in a friendly way. [Mylearningplan.com](http://mylearningplan.com) allows teachers to log in, choose PDs, which are best suited to their needs, and it stores all of their CEU Credits for easy access. He mentioned how difficult it was for him to log into Home Station. He stated that the present methods for achieving professional development credits were extremely unclear, especially for new teachers. If his plan succeeds, this new method would be available for teachers by this August. He also informed Pamela that the district does receive Title II Money, which is specifically deemed for professional development, therefore when teachers are only utilizing five opportunities per school year, something is definitely wrong.

Since Dr. Robins shared that he used to be the principal of an alternative high school, Pamela decided to take this interview a step further and ask a few questions regarding influencing the changing of the culture at Miller Middle School.

She asked him how he influenced the behavior of his students even though the students had a poor home life and very little parental involvement. He stated that every single teacher in the building had “Family Time,” which consisted of 45 minutes each morning. Each teacher had 12-14 students, all in different grade levels. In this time, they discussed problems, school, life, etc. They developed a bond. The teacher checked the grades and mentored the students. The older students began to feel responsible for the younger students and their relationships strengthened. It was as if the family situation that the students were missing, was achieved through “Family Time.” They even had a “Family Reunion” where food was brought and celebration occurred.

Pamela asked what he did to involve his community with the school. Dr. Robins shared that this was the toughest part of his job by far. He obtained some assistance from local churches and a few businesses, but that was about all that he could do.

After gathering data from the administration, teachers, and students, Pamela felt that she was ready to be brainstorming some strategies to help alleviate some of the challenges occurring at Miller Middle School.

SOLUTIONS AND RECOMMENDATIONS

Addressing Student Discipline in the Classroom

After gathering information for her needs assessment and researching literature addressing classroom disciplinary issues, Pamela knew that her recommendations should follow an ecological approach. “Ecological approaches to classroom management, school-wide positive behavioral supports, and social and emotional learning” (Osher, Bear, Sprague, & Doyle, 2010, p. 48). The Ecological approach demonstrates the importance of a classroom environment where students collaboratively work in stations lasting for a certain amount of time and then they move to the next task. In this type of organization, the teacher acts as the facilitator. If the actual lessons are engaging and captivating enough, classroom behavior maintenance will, ultimately, become automatic. This system includes a solid foundation with regard to clear, common, consistent expectations. Additionally, classroom interventions occur and individualized student support is offered to prevent the need for administrative interventions. Students learn how to solve problems and adapt to their surrounding environment while managing their emotions and demonstrating self-discipline and social skills.

Improving Classroom Management and Teacher Retention

Skiba (2000) emphasizes the notion that a “zero tolerance” policy may not be the most effective solution with regard to maintaining discipline among students. Other strategies such as preventative strategies, bullying prevention, and early identification are worth researching further. Most schools adhere to a zero-tolerance policy for the possession of weapons and/or drugs. Skiba addresses many “trivial instances” where the zero tolerance policies in schools caused students to receive harsh consequences for what seemed to be mistaken. This article stresses the necessity to instill consistency with regard to zero tolerance and the design of clear and concise expectations in an effort to maintain absolute equity. Additionally, these policies should not contain consequences such as expulsion for a student who brings a nail file to school. In addition to the ineffectiveness of a zero-tolerance policy for discipline, Skiba reiterates the fact that a large number of continuous “long-term suspensions and expulsions” eventually result in those students dropping out, thus proving this method of discipline to be ineffective.

Sugai, Sprague, Horner, and Walker (2000) contribute a unique approach to the student discipline problem, by addressing the importance of clearly and consistently documenting not only the discipline referrals but also the strategies and interventions associated with the infractions. To best suit the situations of the three different groups of students, categorized by their specific discipline needs, the following customized interventions, which represent a 3-tiered approach, are offered: Universal Interventions, Selected Interventions, and Targeted Interventions. Sugai, et al. (2000) emphasize the importance of schools utilizing a multitude of interventions based upon the unique student’s situation instead of simply relying on “the one perfect strategy”.

Pamela shared with Bryson and the Assistant Principals that there needs to be more attention from the county office level, with regard to hiring the administration for Miller Middle School. There should be an extra stipend for assistant principals willing to take on the disciplinary responsibilities specific to this school.

After speaking with the Director of the local Boys & Girls Club, he expressed his willingness to offer the teachers some professional development sharing some valuable tips addressing how to better connect with students and therefore decrease discipline issues among the school’s toughest population. Pamela recommended to the administration that Title I money should be set aside to pay for Boys and Girls Club Mentors to be onsite during the school day at least twice a week if not permanent additions to the school staff. These mentors would be available to assist with discipline, counseling, and reading assistance.

Community service opportunities for students should be the main priority of the school. Each homeroom should “adopt” a local non-profit organization.

These sites offer excellent opportunities for students to connect to not only their own community but the world as well.

Presently, elective teachers are not responsible for homeroom classes, nor are guidance, media, and instructional coaches. Each certified person, including encore teachers, guidance, media specialist, instructional coaches, should have an advisory time in the morning consisting of 30-45 minutes. This time should be called “Family Time” where the instructor is assigned no more than 15 students ranging in grades 6-8. During this time, the teacher will check grades, hold discussions, and mentor students. Older students will mentor younger students. This “family bond” should be continued throughout all 3 years of each student’s middle school experience.

During this time, expanded courses should be offered for students who are interested such as career studies where guest speakers talk to students about their careers, coding/computer science classes including Mobile CSP, graphic designs and 3D printing (since the school already has a state-of-the-art 3D printer) and STEM infusion classes. These course offerings could be enhanced through the Career and Technical Education (CTE) elective.

The CTE elective needs to include a real-world connection so that students may receive some hands-on job experiences. Having students create powerpoints about different careers is not enough to spark interest, nor is it going to keep interest alive. Guest speakers need to be brought to the classrooms; trips need to be taken to local businesses, and documentaries need to be shown so students may see their dream careers in action.

Strengthening Teacher Capacity and Increasing Retention

Teacher capacity building involves cultivating and nurturing teachers’ abilities over a wide range of dimensions. Broadly speaking, the conversation of teacher capacity encompasses three categories: (a) knowledge, including content and domain knowledge related to the subject-matter, pedagogical knowledge, education foundational knowledge, technological knowledge among many more, (b) craft skills, mainly concerning with planning, organizing, instructional materials, monitoring and disciplining students and evaluating their learning process, as well as work in collaboration with colleagues, parent, and the community; (c) dispositions, which include attitudes, beliefs, and views (McDiarmid & Clevenger-Bright, 2008). Researchers and educational practitioners believed that the conceptions of teacher capacity continue to expand and evolve which reflects the currents status of the

intellectual, social, technological, and political forces in a diverse world (Howard & Aleman, 2008). Enhancing teacher capacity requires abundant efforts in preservice teachers' training from teacher preparation programs in higher education institutions, as well as persistent endeavors in teacher training and professional development provided for junior in-service teachers.

The issue of teacher retention, especially the high attrition rate among early career teachers has been an increasing concern over the decades (Hong, 2012). The NCTAF (2003) national report concluded that beginning teachers' early attrition is the main contributor to the teacher shortage in urban and rural schools where poor and minority student makeup is remarkably high. Research showed that 14% of beginning teachers end their teaching job in their first year, 33% leave in three years, and almost 50% leave in five years (Wiebke, & Bardin, 2009; Haycock, 2006). Another report from a longitudinal study conducted on beginning teachers demonstrated that amongst all beginning teachers in the 2007–08 time period, 10% ceased their teaching profession in the first year, 12% did not teach in the second year, 15% did not teach in their third year, and 17 percent did not teach in their fourth year (Gray & Taie, 2015). In the state of West Virginia, approximately a fifth of early career teachers left their jobs by the end of their first year, and about a third had left by the end of their fourth year (Lochmiller, Adachi, Chesnut, & Johnson, 2016). In spite of state actions and legislation to reduce teacher attrition, the state of North Carolina also reported their highest attrition rate recorded at approximately 15% in 2015, which was 4% higher compared to what it was in 2010. The North Carolina State Board of Education (2015) reported that the overall state attrition rate during 2014-2015 was 14.84%.

In recent years, researchers increasingly have undertaken a considerable number of studies in an attempt to identify the reasons why teachers, especially some early career teachers, choose to leave shortly after their entry into the teaching profession while others choose to stay (De Stercke, Goyette, & Robertson, 2015; Rots, Aalterman, Devos, & Vlerick 2010). Teacher attrition and low retention rate is a non-linear and complex phenomenon often linked to a wide variety of interrelated reasons on both personal and institutional levels (Lindqvist, Nordänger, & Carlsson, 2014; Mertler, 2016). Beginning teachers' attrition is often associated with a low sense of self-efficacy of their classroom teaching and a dearth of on-the-job mentoring and support in the early stage of their teaching career (Nahal, 2009). Many teachers experience a disconnect between what they learned from teacher preparation programs and the day-to-day realities faced in the classroom. Leavers who displayed weaker self-efficacy beliefs tended to need additional support and assistance from school administrators and they are also more inclined to have created stress and emotional

burnout for themselves (Hong, 2012). Research showed that the struggle with classroom management is among one of the most critical reasons that caused them to leave the profession (Hong, 2012; Weiner, 2002).

To stay in teaching, teachers need to stay in supportive and healthy school conditions that promote growth and development (Cochran-Smith, 2004). School administration, such as principals, have a significant impact on teacher retention (Young, 2015). Efforts toward professional development for teachers, such as opportunities via cooperative teaching and planning with, college faculty member and, in-service professional development workshops, appear to considerably aid junior teachers' entry into and perseverance in teaching (Latham & Vogt, 2007; Monroe, Blackwell, & Pepper, 2010). Mentoring and induction programs have also been identified as a solution to alleviate the problem of early career teacher attrition and retention (Long et al., 2012).

After meeting with Dr. Robins and researching different professional development tracking systems for teacher professional development, Pamela recommended to Bryson and Dr. Robins that the website: <https://www.mylearningplan.com> needs to be adopted and implemented as soon as possible and Home Station needs to be discarded as the means for PD access. Dr. Robins asked Pamela if he could share her report with the district because many of her findings reiterated the need for a new direction.

Pamela also recommended that the district provide mandatory training on how to use this site. This training includes unlimited support and follow-up procedures. Pamela also suggested that there should be a website created to specifically house lesson plans teachers are willing to share with other teachers, especially beginning teachers. This site should include ideas for classroom management (that have been proven to work with this particular population), lesson ideas, and time management advice. It should also be a place where teachers can provide advice for new and beginning teachers. Teachers should be recognized for achievements on this site and college backgrounds should be celebrated.

Teachers at Miller Middle School are currently afforded an hour and a half planning time each day. Presently, 4 out of 5 of these sessions, teachers are required to meet with either other grade-level teachers or teachers who share their subject area. Pamela recommended that only one of these times be used to have a grade-level meeting. The other four sessions should be provided to the teachers to use for parent contact, personal lesson planning/grading, and optional online PD.

Strengthening Community Connection/Involvement

After meeting with administration, teachers, and the students, Pamela came to realize that this need was not as much of an issue as Bryson's team had suggested. She was unaware of the social media aspect with regard to the positive publicity the school was receiving. Secondly, the majority of the teachers felt supported by the community. If parental/community connections are to be made, teachers need to be afforded the time during the school day to complete these tasks. Presently, teachers do not feel as though they have autonomy over their planning time and this needs to change.

Since many of the students participated in afterschool programs with the local Boys and Girls Club and had shown favorable results, Pamela suggested that Miller Middle School establish a more formal relationship with the community organization. She suggested that the teachers should attend a mandatory PD Session taught by the director of the local Boys and Girls Club to learn about ways to better connect with our school population and effective discipline strategies.

In addition to strengthening relations with the immediate school community, Pamela suggested that the school enforce mandatory parent-teacher conferences once per year. She also suggested that the school appoint a school liaison who would be responsible for reporting positive occurrences to the local newspaper. This would help local community members see the good things being accomplished by members of the Miller Middle School community as well as motivate and recognize students for their achievements.

With all the recommendations Pamela presented to the administrative team, she was happy to report that each of these was very cost-effective. She was excited to hear back from administration and see how she could begin working with the school community to begin implementing her recommendations.

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KEY TERMS AND DEFINITIONS

Attrition: A reduction or decrease in numbers.

CEU: Continuing education units. These are units that are provided to teachers after they have completed a certain number of lessons or hours of training.

Classroom Management: Strategies teachers employ to stay organized and help students focus on the content being taught.

Constituent: Objects or individuals that comprise a system (or community).

Discipline: Intervening to help an individual act in accordance with rules. Discipline is often taught through training and through the punishment of undesirable behavior.

Needs Analysis: An analysis that is conducted after a needs assessment is conducted. During analysis, practitioners explore the root causes driving performance gaps that have been identified in the needs assessment.

Needs Assessment: Conducting an assessment to identify performance gaps. Gaps are identified by discussing desired performance gaps and looking to see if there are discrepancies with current performance practices.

Professional Development: The opportunity for an individual to enhance existing skills and acquire new skills that may assist their performance at work.

Triangulation: A qualitative practice of gathering data from multiple sources and determining whether alignment and consistency exist among the data gathered.

Turnover: Change or movement of people within an organization.

APPENDIX: QUESTIONS FOR DISCUSSION

1. As a performance improvement practitioner, what are some of the systemic issues facing Miller Middle School? What might you do to evaluate if progress is made to address the issues you have identified?
2. What are some strategies that Pamela should consider when evaluating whether her recommendations were implemented effectively? How might she determine that the recommendations were successfully implemented if she were to follow-up after 12 months?
3. One of the challenges raised throughout this case was the significant number of requirements for teachers earning CEUs. What are some ways that you might revise the professional development training program if you were Pamela? What feedback would you provide the district office?
4. What are some additional strategies that Miller Middle School could employ for further engaging the community? How can the school ensure that parents, teachers, and students are all on the same page?
5. With the rate of turnover being very high at 48%, Miller Middle School has had a very difficult time retaining new teachers. What types of mentoring opportunities do you think the school might want to implement in an effort to support their newly hired teachers?

Chapter 12

Using Training to Address Excessive Turnover in a Fast Food Organization

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EXECUTIVE SUMMARY

The purpose of this case is to present a story about an effort to address a threatening business problem for a company in an industry that relies on low-wage, minimally-skilled employees. The industry is characterized by high turnover that makes training efforts difficult. The designers and developers had to be flexible, creative and innovative in creating their project plan and instructional intervention. The dynamics of the organization were fluid. The team had to consider these dynamics in selecting their approach. They had to be comfortable with using approximations and assumptions in developing the inputs for their design and development decisions. Ambiguity and uncertainty were constants for the team members.

DOI: 10.4018/978-1-7998-0054-5.ch012

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ORGANIZATION BACKGROUND

Bob's Bitsy Burgers, Bowls & Beverages (BBBB) was founded in 1950 in Richmond, Virginia by Robert and Sara Ryson. They built the company around a cooking method they developed that is still considered unique in the industry and remains a trade secret. They also celebrated the "slider" size of their bitsy burgers. They added to the menu over the years to include bitsy breakfasts (sausage biscuits, chicken biscuits, egg biscuit), bitsy bowls (chili, tomato soup) and bitsy bakes (apple and blueberry pies). Though the menu expanded, BBBB is still known for its (itsy)-bitsy burger. Bob's is also known for its 'niller shakes. The secret is in the custard base used in the shake.

In 2015 the Ryson family heirs sold the company and the company-owned restaurants to a private equity firm that had acquired other regional fast-food categorized assets. At the time of the acquisition, sales were about \$350,000,000 in 400 locations. In the past sales had reached \$450,000,000 with over 600 restaurants in operation. Today, most locations are open 24/7. There are about 5000 total employees, with 4900 working in the actual restaurants. The 445 locations are 90% company owned. Geographically, the stores are located from Virginia to Florida to Texas. There are locations in 11 states.

In 2017, the company sold again to a larger private equity group based in Charlotte, NC. Currently, the company is facing a plethora of challenges, including turnover in 2017 in excess of 200% in an industry that has experienced an increase in turnover to 150% as the economy has improved and opportunities in the "gig economy" have emerged. Most of BBBB's restaurants are somewhat dated in appearance and are located in major metropolitan and midsize cities. (The restaurants were described by one manager as "run down").

In addition, the fast food segment of the restaurant industry is engaged in an expansion phase (growing at a rate higher than GDP) with different dining concepts being introduced regularly ("Technomic: Fast casual will continue to lead industry growth," n.d.). The competition for employees is extreme. To reduce the need for workers, some fast food organizations are experimenting with self-service kiosks, automated food preparation (such as burger cooking), third party delivery (Door Dash, Uber eats), and online ordering and location pickup.

Wage competition is not viable because of the price elasticity associated with this industry. Margins are low so any increase in an expense has to be added to the price and the high price sensitivity of the customer base would drive them to other options. Addressing the turnover challenge at BBBB, which management estimates

Using Training to Address Excessive Turnover in a Fast Food Organization

is currently costing the firm about \$6,000,000 in additional expense, is one of the highest priorities with the current management team.

Most recent results for BBBB show a year over year decline in same-store sales of 9%. In addition, earnings decreased in the last two years. While the company has high brand recognition in its operating territory, it is highest among the age group 50 and above. The company believes that it must attract a broader range of age groups to remain viable. Exploring different food concepts that would appeal to a broader age demographic is being discussed along with using more automation in the local restaurants to offset some of the turnover impacts.

Sales are split between drive-through and in-store. Currently, drive through sales are \$175,000,000. Management is beginning to refurbish some key stores to bring the décor up to current styles to be more appealing to younger diners. Many of the BBBB stores are located in neighborhoods that are aging. BBBB did not pursue a highway-based location strategy. Few of the stores are located on busy exits along major interstates. The Ryson's wanted the stores to be part of the communities they operated in. They wanted to hire employees from those communities as well. Their thinking was to have a regular customer base that could eat at the restaurant each day for whatever meal they wanted. They added the overnight shift initially in locations that had overnight industry, such as manufacturing and warehousing.

SETTING THE STAGE

The turnover at BBBB is not isolated to local restaurant employees. Senior management has a similar turnover, with 3 CEOs, 2 CFOs, 2 Chief People Officers, 3 Marketing Officers and similar turnover in other leadership positions in 3 years. The current CEO, Seth Billingsley, was recruited by the private equity ownership and joined BBBB in June of 2018. Seth was formerly with the Street Taco (ST) organization. ST operates in 40 states with a hybrid model of food trucks and fixed location restaurants. Seth has a strong marketing background and led ST in developing its “mobile food platform” (food trucks that move from location to location during the day). The current Chief People Officer (CPO) and the Chief Learning Officer (CLO) have prior experience with Lickin' Chicken, a Jacksonville, FL. based fried chicken centered fast food organization. The CLO, Michael Wilson, is responsible for training development and delivery along with employee communications. Rebecca Wynn is the CPO.

Michael is very experienced in leading training and development function in the industry. He started his career as an elementary school teacher and moved to corporate training and development after earning an MEd.in instructional design. He described the situation he found when he joined BBBB as “worse than nothing”. The “training” was word of mouth or job-aid cards showing pictures of how to prepare the various menu items - that may or may not be current. There was minimal to no communication between the various stores unless the regional general managers shared information. There was no sense that training was a strategic necessity. Prior management had cut training to shore up earnings and relied on general managers to train new hires.

Michael joined BBBB in 2016. After a quick assessment of the situation, he developed a triage plan to get the basic training tools installed, including getting approval for an integrated learning management system (LMS) that others in the industry use – called Noodle. As he told the authors, “the assessment was quick there was nothing to assess”. Michael is well versed in the training efforts of other fast food organizations. He is a past president of the Florida chapter of ATD. He is well networked with his peers in other fast food companies as well as with training product vendors and consultants.

The Noodle training platform launched in May 2018. It will allow Michael to develop and deliver online training that can be presented using an employee’s personal device such as a phone or tablet. The functionality in Noodle is robust, including the ability to provide a company-wide intranet, training history, badging, and other training tricks.

In a briefing the authors, Michael identified his first challenge as updating the job aids to reflect proper food preparation instructions based on the current menu as well as make sure all of the stores had a supply of them and the staff was properly trained. He then shared an example of the “chaos” he was trying to navigate in developing training. With little notice to the internal support functions (such as training), the food development team made a to change how the bitsy burgers were prepared. Michael noted this type of change typically is planned and rolled out over a long period of time so that proper training can be developed and implemented. In this case, the change was announced with a ‘go live date’, and Michael was challenged to keep developing job aids for the old method (since they were out of date) and develop job aids and training for the new method while the new equipment was being installed in the locations on a rolling basis. He observed that with the level of turnover, training current staff and new staff was highly challenging, even before the addition of developing and implementing training for a new cooking method with new equipment.

Using Training to Address Excessive Turnover in a Fast Food Organization

Michael currently has a staff of one in-house instructional designer and developer and one employee communications manager. Resources are limited and stretched. He noted that “priorities are constantly shifting, and the development cycle is never long enough to allow for a thoughtful approach”. Michael calls it “the full panic development practice”. He says his goal right now is “to just get something out and move onto the next priority”. He is not sure if what he is delivering is being used. Michael is frustrated yet determined.

Michael described to us the revolving door in the leadership. He explained that while he was working to develop and install a new training system, that included developing content and getting buy-in from general managers, he also watched two CPOs come and go. Rebecca joined BBBB as the Chief People Officer (CPO) in August 2018 after Seth became the CEO. She and Seth had known each other through various trade association activities. Rebecca knew Michael from their days at Lickin’ Chicken.

We talked to Rebecca and she gave an overview of the industry and the challenge. She said, “I knew things were challenging for BBBB when I came. I did not know how challenging. I know the industry has seen an increasing turnover at the restaurant level. Last industry figures were 150% in 2017. That was up from about 80% in 2010 (Batt et al., 2014; “Industries at a Glance: Food Services and Drinking Places: NAICS 722,” n.d.). I also know we (the industry and BBBB) are competing for employees now with alternatives such as driving for Uber or being a fulfiller for Instacart. I know the labor market is changing with the rise of the “gig economy” (Upson, 2018).

Rebecca commented to us that the fast food segment of the restaurant industry is growing at an accelerated rate at a rate greater than the general economy (“Technomic: Fast casual will continue to lead industry growth,” n.d.). She said “everyone thinks we take high school aged employees and train them up for their next job. Well, that is a myth! The average age in fast food is about 24 years old. Here at BBBB, it is 29 years old. The research has been consistent since 2000. High school aged candidates are not working. They are doing other activities to better prepare for college (Abrams & Gebeloff, 2018; Industry, Reveals, & Statistics, 2018).

The authors summarized their findings from the discussions with Michael and Rebecca as follows:

1. Turnover at the local store level that is 30% above the national average.
2. No current systemized training program.
3. No training philosophy.
4. No learning culture to serve as a base for training.

5. Environmental challenges in the form of changing tastes among diners and emerging technologies.
6. Unappealing restaurants for younger diners.
7. Likely a morale and engagement problem with general managers.
8. No skill development system for shift leaders to move into larger jobs (with pay increases).
9. Financial constraints on “paying people to stay” with a wage increase.
10. Leadership turnover that has cost the organization time and morale.

With this type of challenge, where there appears to be a ‘slow death’ going on, individual managers can become overwhelmed. Fortunately, Seth, Rebecca, and Michael are experienced professionals and they all seem committed to working together to turn the situation around. Michael believes that training can play a powerful role in addressing the turnover at the local level. He does not have the data, but his experience tells him to start there.

CASE DESCRIPTION

Michael has known Wynn Nelms since the early 2000s. They were in the same master’s program and have kept in touch. Wynn started his own consulting firm in 2010 focusing on developing training for small corporations and non-profits. He delivers for his clients using a team of independent contractors for project management, design, and development. He typically uses a structured design approach based on the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) (Akil, n.d.; Jones & Jones, n.d.). The ADDIE model has nine stages:

1. Identify instructional goals;
2. Conduct instructional analysis;
3. Identify entry behaviors and learner characteristics;
4. Write performance objectives;
5. Develop criterion-referenced test items;
6. Develop an instructional strategy;
7. Develop and select instructional materials;
8. Develop and conduct formative evaluation;
9. Develop and conduct a summative evaluation.

Using Training to Address Excessive Turnover in a Fast Food Organization

Michael sees Wynn at an ATD networking event and shares the challenge he is facing at BBBB. Wynn is amazed at the challenge and asks if he can be of help. Michael laughs. “Yes, you can help! Can you recruit and train employees for all the locations faster than they are leaving? We don’t even keep the people we hire long enough to train them, even if we had the training to give them! Oh, and throw in, I don’t have any budget to hire you! Wynn, thanks for the offer, as soon as we figure out where to start, I will give you a call.”

Wynn continues to think about the puzzle that Michael has shared. How could he get in on the ground floor to help develop training and it not cost anything? A couple of days later, Wynn has an idea. He calls Michael to share it. “Michael, I have been thinking about the conversation we had at ATD this week. I have an idea. What if I reach out to Dr. Wayne at the University and see if he has any instructional design students who would be interested in doing an internship? I think they can do something called an externship where the students work on real problems and get class credit. Dr. Wayne always has some great students and the summer is coming – perfect internship time.”

Michael smiles to himself. He really appreciates Wynn call. “Wynn, why not? Let’s give it a try. Let me know what Dr. Wayne says and if he is interested, I can update him. I have been trying to prioritize several training areas, including food prep; store cleanliness; customer service skills; management skills including conflict resolution, communications, and coaching.

If Dr. Wayne is a go, I would want the courses developed to work on our learning platform, Noodle. Also, I am committed to delivering the content to our employees’ personal devices, either their phone or their tablet. I need to update the job aids for food prep, especially with the new cooking method being launched in September or October. I have this idea about using games and badges as part of the training method. I am seeing a lot of positive press about gamification and I think it would help keep our younger workers engaged with our material. Our learning system can handle some of the badging stuff. So yes, let’s see what Dr. Wayne says. As an aside, I am trying to hire a new instructional designer, Peggy left last week. Let me know if you hear of anyone looking for a fulltime thing.”

Wynn called Dr. Wayne and got a quick, yes. He set up a call with Michael, Dr. Wayne and himself to discuss the opportunity. Michael shared the challenge and the available opportunity. Dr. Wayne made his notes and in his next class, he shared the opportunity. The class was the final development opportunity before most of the students would graduate with their Master of Education in Education Technology and Design. One person, Rico, voiced some interest in the project.

The nature of the class was a cohort. Typically, the classes involved group development of a course or module for a client with an emphasis on a particular phase of the ADDIE model. The entire program was delivered as an online, synchronous program, where students worked remotely in self-forming groups to develop deliverables. This cohort had performed all of the steps in the ADDIE model through their prior course work in the program.

Rico wanted to work on this project to get some practical experience and maybe a job opportunity with the client, BBBB. He discussed his interest with Dr. Wayne, who shared that any of the various projects that BBBB would like developed would probably require at least one if not two more classmates. Rico reached out to Shawna, another classmate that he had worked on several projects and asked her to work with him on it. They let Dr. Wayne know they were up for the challenge.

Creating the Training Intervention

Dr. Wayne called Wynn and a conference call was set up with Dr. Wayne, Wynn, Michael, Rico and Shawna. Michael gave some background on the training opportunities that could be worked on:

- Develop a job aid for the new cooking method;
- Develop management training for shift leaders;
- Develop job aid for restaurant cleanliness.

After the call, Rico, Shawna, and Dr. Wayne discussed the options. They agreed they wanted the more “involved” opportunity – developing management training for shift leaders. Now where to start.

Here is a summary of their thinking. “We have 6 weeks left in the semester. We need to interview SMEs to get a sense of what type of training is needed. We need to develop a project plan. We need to begin thinking about how to design to a personal device. We need to learn about the LMS, Noodle. We need to develop a profile of our learner. We need to develop and get agreement on our instructional goals, do our instruction analysis, develop performance objectives based on our research; develop the instructional strategy, select or develop the instructional materials; develop the formative evaluation – even if we don’t do it – the client can do that later. We really need to get agreement on the scope of the project”.

Then Shawna, the realist and pragmatist, shared an approach that might get the project going and position it to hand it off once the course concluded. “We need to limit the scope of our deliverable to a concept that will allow further development; a project management plan; a development a tool (Storyline 360) for content; design and development a template that can be used for the program; possibly create a “narrative” we can use through the whole program based on our vision for the intervention (create characters based on composites of actual employees; create likely scenarios that allow the learner to see and hear the behaviors, and assessments based on the learning objectives); integrate ‘must haves’ based on the Michael’s broader vision (gamification; personal device delivery; Noodles LMS; community building activities and methods – internal social media – to build peer to peer resources). Let’s run this by Michael and make sure he is good with our approach.”

Rico, Shawna, and Dr. Wayne brainstormed the model they should use. A summary of Dr. Wayne’s notes showed the discussion. “Should we use the SAM (Successive Approximation Model) to design and development since time is of the essence, or do we need to adapt the ADDIE model to reflect the triage nature of the intervention? Maybe a hybrid of ADDIE and SAM? We really haven’t spent any time using the SAM approach, but this seems like the right project to use it”.

SAM is a well-regarded design model that allows projects to be developed iteratively. Rapid prototyping is typically part of the development process when using SAM. “SAM offers an instructional design approach consisting of repeated small steps, or iterations, that are intended to address some of the most common instructional design pain points, like meeting timelines, staying on budget and collaborating with Subject Matter Experts (SMEs)” (“An Introduction to SAM for Instructional Designers - E-Learning Heroes,” n.d.). As an iterative approach, SAM is a cyclical model, that uses rapid prototyping to move from analysis to design to development. On each iteration of the cycle, feedback is collected to inform the next rotation through. Rapid prototyping is a typical part of the SAM process (“Agile eLearning Development with SAM | Allen Interactions,” n.d.). This approach seems to fit the time constraints and project requirements.

Rico summarized the benefits of using SAM as an approach. “This will give us experience in using a model that is being adopted in many areas. We can get Michael a good design that can be validated/updated later with sound research. We can get him a couple of modules to begin a formative evaluation. We can help him accomplish his goal of getting some content out, especially because we are going to be focusing on basic management skills. BBBB has no training at all in this area so we can deliver something. We’ll use SAM and include recommendations for research and possible conversion to ADDIE once the “content crisis” has passed”.

Developing the Project Management Plan

Agreement on the Scope of the Project

Rico and Shawna working with Wynn developed a draft of a full project management plan for the intervention. The purpose was to “greenfield” the project as if the team would continue on the project beyond their graduation. They also wanted to take a comprehensive view of the project by making it reality based so Michael could assume responsibility for the project or approve additional deliverables based on a phased approach. The team proposed a more ‘radical approach’ to the challenge. They wanted to develop a “pre-course” that crew members would take.

Their idea was based on the impact of the turnover as described by Michael. He shared that a crew member is likely to be promoted to shift leader in less than a month because of the rate of turnover. The indirect benefit hoped for would be that crew members would begin *seeing* the skills needed to be a successful shift leader BEFORE a ‘battlefield’ promotion where the shift leader quits on Friday and a crew member is promoted on Monday...likely with no skills and no training, setting up a multiplier effect on turnover - unprepared, newly promoted shift leader “managing” newly hired crew members.

The pre-course would be followed by a more comprehensive shift leader training program that would have the learner *performing* the skills being presented. The pre-course would be designed to have the crew member *identify* the essential management skills. Of course, all of this was contingent on the crew member and the shift leader *staying* in a position long enough to engage in the training and benefit from the intervention.

If that worked, even a little, then employment tenure should increase, and turnover should decrease. Michael would have “created” enough “budget” from the cost savings in turnover to “fund” further development of his training and development strategy, including researching the current learning culture at BBBB and identifying opportunities in the culture that could be leveraged to further improve retention/ decrease turnover.

Timeline for Delivery

The team developed a timeline for producing the pre-course that allowed them to design the full crew member pre-course and develop the first module. This would meet their academic requirements and fulfill their externship agreement with Michael. The team also expanded the timeline for future development, including budgeting to allow Michael to request funding and resources for further development.

Milestones

The team established milestones for each of the main deliverables, including interviews with SMEs; learner characteristics and learning context; learning objectives; instructional strategy; formative evaluation plan and methods; and development of module templates and module 1.

Meeting Schedules

The team established a weekly update meeting that included Michael, Wynn, Rico and Shawna, and sometimes Dr. Wayne. These update meeting always had an agenda that was published beforehand and time was limited to 30 minutes. Smaller design meetings were held by Wynn, Rico, Shawna and Dr. Wayne based on the progress of the project towards each milestone. Rico and Shawna collaborated daily. All meetings were held using Zoom as it seemed the most reliable platform and the meetings could be recorded for future reference as the project moved to new designer/developers or additional designer/developers/project manager. A website was created as well to store all the documents, notes, ideas and recordings using Google Docs and Google Sheets.

Access to LMS

None of the design and development team had used the Noodle platform. Michael provided access to the individuals on the team and gave a quick overview of its functionality. The team was responsible for learning more based on the vision for the project and Michael's requirements expectations.

Research Phase

External Research on Practices in High Performing/Low Turnover Organizations With Similar Demographics/Industry

Shawna took on the responsibility of doing external industry research to learn more about what other organizations were doing to address turnover since it seemed to be an industry-wide challenge. She looked at the National Restaurant Association for industry insights as well as trade articles on individual organizations. She found an outlier organization based in east Tennessee, PALS (Pal's Sudden Service) (Buchanan, n.d.). She was stunned when she researched the organization further to find that they had won a Malcomb Baldrige award in 2001 as the National Quality Award winner for Small Business. She found other articles in the business trade press that highlighted PAL's culture-based approach to learning. She also learned that the turnover in 2016 for Pal's was 37% (Yakowicz, n.d.)! Clearly, something is going on at Pal's that is working when it comes to training and development. Everyone on the team was excited about this finding and it was 'warehoused' for further study once the "content crisis" was contained.

Interviews With SMEs

Rico and Shawna developed an interview questionnaire and schedule for learning more from the SMEs. Michael provided a list of three subject matter experts to the team. The list included a regional manager, Steve, a general manager, Patricia, a regional training and quality assurance manager, Rhonda. The team scheduled interviews with each member to get their opinion on the efficacy of the approach, including;

- Content recommendations;
- Their willingness to champion the effort with their peers;
- Their opinion as to technical details, such as availability of wireless in the restaurants,
- The level of interest in such training by crew members and shift leaders; and
- Other comments, ideas, and opinions about the approach.

Learner Profile

As there was limited time to do a detailed learner profile, the team developed an approximation for the learner profile using publicly available data from the Bureau of Labor statistics for demographics of fast food workers. This data was shared with Michael who confirmed it. It was shared with the SMEs who agreed it was a good proxy for the targeted learners.

Instructional Context

Again, based on the constricted project time available, the team assumed an instructional context for the intervention. The assumption was the course would be delivered on personal devices, such as phones and tablets, as well as be available on the company intranet via restaurant located computer. Wireless access was assumed as well, including enough bandwidth to allow animations to be displayed in a streaming format. The team decided that each module for the pre-course would be no more than five minutes in length and that time would be allowed during a given shift for the crew member to engage with a given module.

Design Phase

Establish the Instructional Goals

Rico developed instructional goals based on Bloom's Taxonomy. For each module developed, the goal would be styled as the learner will be able to "identify". The team also recommended that the shift leader course be styled as the learner will be able to "perform".

Design a Pre-Course for Crew Members

The team proposed the pre-course to Michael based on recommendations from the SME interviews. The modules would be:

- Communications
- Delegation
- Conflict Resolution
- Problem-solving
- Timeliness

Each module would be designed around a “real life situation” using an animation developed in Vyond. Storyline 360 would be used to deliver the full course. A module-based, brand aware home screen would present the course with state changes showing which modules have been completed and which module are yet to be completed.

While a learner would be allowed to engage with any module, he could only complete one module at a time. The designers created an animated narrator (pedagogical/virtual agent) to provide an overview of the course and introduce/coach the learner for each module.

Different animated characters were developed for each module, all representative of the demographics of the crew members in terms of age, race, and gender. The idea is that the characters will “grow” in their skills and position through the development program, much like they would on a television series. The characters would also acknowledge/model the skills they were learning and how those could be used in other facets of their life, as well as other job opportunities. Thus, the learners would be able to see the worth of the training as a benefit of employment.

The team developed a storyboard for each scenario presented and submitted to Michael for approval. They also developed a selection of design options for Michael to choose from. Once Michael provides his input in keeping with the timeline, the team moved to the development phase.

Michael approved the overall plan as well as the method for delivering instruction. The team used a rapid prototyping approach (SAM) to get feedback quickly from the client. This allowed them to keep the client engaged and get his thinking quickly. For instance, the client very much wanted a gamification element in the design. The team worried that the content did not lend itself well to that approach. Michael insisted and ultimately there was a compromise and the team inserted several gamification elements in the form of drag and drop quizzes. These quizzes would help the learner prepare for the assessment that followed each module and would be included in the LMS system. The quizzes would not be included.

Development Phase

Produce a Mobile-Ready Set of Modules

Based on the instructional design, the team created a home/landing page to hold the instructional modules and an introduction to the course, including the learning objectives, the expected benefits of the course, how the module could be accessed and how much time each module should take. The team developed the Course Introduction (Module A) and Timeliness (Module B) based on insights gained from the SMEs.

Using Training to Address Excessive Turnover in a Fast Food Organization

The development was produced on a computer in Storyline 360, using Vyond for animations based on a storyboard that highlighted a key set of timeliness attributes. The team developed a memorable acronym of the timeliness module to help the learner with the concepts presented. Two characters were developed in the module, Traci, the Shift Leader, and Robin, the chronically tardy crew member. Several scenes were developed to model the importance of being on time and the impact of tardiness on the rest of the team as well as consequences if the pattern continued. Finally, Traci offered Robin some tips on starting her shift on time. This was followed by a quick assessment to allow the learner to identify the concepts presented in the scenes.

Submit for Formative Evaluation for Each Developed Module

During internal testing, the team realized that the animations they had created would not play on smaller devices. Research into how to format Vyond animations using Camtasia resolved the issue. The modules were then submitted to Michael and his new instructional designer, William.

Feedback was offered by William who had not been involved in the design phase. This new input challenged the team to incorporate some new elements. Because of the time constraints, the team pushed back on William's recommendations and used the prototype that was developed to do a formative evaluation. The results of the formative evaluation plus William's recommendations could be incorporated into a beta version of the modules. The team developed a formative evaluation survey using Survey Monkey. The formative evaluation was to be conducted by William so he could be in a position to assume further development of the course and program.

Add Gamification Elements Based on Client Direction

Michael reviewed the course and pushed the team hard to add some gamified elements. He described his beliefs that gamification and games within instruction would help his learners remain more engaged with the material. He also wanted to utilize the leaderboard and badging functionality available in Noodle. The team researched some options and best practices for incorporating this desire. Ultimately, all agreed to add some gamified 'knowledge checks' that allowed the learner to drag and drop responses to described scenarios based on each concept presented.

CURRENT CHALLENGES FACING THE ORGANIZATION

Limited Training Content and Delivery

BBBB is challenged on many fronts. Training suffers from financial starvation and limited appreciation for its impact on the financial results of the company. Michael, and now William's, challenge is to design, develop and deploy content that can be consumed by learners at a pace that does not overwhelm them. There appears to be little learning culture in place at BBBB on which to build. The level of informal learning is not known and thus cannot be leveraged to offset the large gaps in the formal training program.

Internal Communication and Support

In addition to apparent weakness in formal training, BBBB is not using any form of mediated internal communication to promote learning communities or peer to peer learning. The design team offered recommendations in this area as a way to begin creating more community within the organization and offering mentor based developmental scaffolding to new shift leaders. The idea is to create a forum where new shift leaders can reach out to more experienced team members for advice and direction on addressing certain managerial challenges. They would also be able to reach out to other shift leaders to find out how they are addressing the same challenges. The Noodle LMS has good functionality in supporting internal communications, peer networked groups and other tools to support peer to peer learning.

SOLUTIONS AND RECOMMENDATIONS

In addition to the recommendations for further development of the Pre-course for crew members and the Shift Leader development course, the team made some broader recommendations based on best practices. Michael, as an experienced CLO, knows he needs more insight into what training and development can contribute to improving the retention rate at BBBB. Conducting a formal research protocol to assess the learning culture and informal learning as it currently exists would provide richer insight into how to develop an effective training and development strategy. The design team made several core assumptions in developing their intervention. The research results would provide guidance as to whether those assumptions are valid before the course is developed further.

Using Training to Address Excessive Turnover in a Fast Food Organization

Another recommendation would be to look closely at the outlier, Pal's. What is Pal's doing that is resulting in such a low turnover ratio? What of their practices can be generalized and applied to BBBB? Pal's promotes its training efforts and uses daily reminders of Pal's practices that keep their restaurants ranked highly with both employees (as evidenced by the very low turnover) and customers. This embrace of training and development seems to have a profound effect on retention as Pal's compensation is similar to other fast food establishments.

The formative and summative evaluation should not be ignored in the haste to deliver content. We worry that these vital feedback steps can be dismissed when there is high urgency to deliver content to address a threatening problem. We recommend that BBBB remain disciplined in the development and deployment process to assure that the performance objectives are being met. One proxy for that would be decreasing turnover *if learning culture has a significant impact on employee retention*. Of course, that would need to be determined by research.

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KEY TERMS AND DEFINITIONS

ADDIE Model: This is a design model that moves through a structured series of defined steps to produce an intervention or other artifacts. The steps include analysis of the situation from multiple perspectives; design based on that analysis; development of the intervention, including the incorporation feedback developed during the development phase; implementation where assumptions are validated; and evaluation, both formative and summative.

Greenfield Project: Much like a green field in farming, a greenfield project is open to the possibilities. There are few constraints beyond imagination, creativity, and vision.

Price Elasticity: This is a term used to explain how consumers react when the price of a product increases. Typically, when the price of an item goes up, the demand for that item goes down and thus revenue goes down. Price elasticity measures the relationship between the increase in the price and the decrease in revenue. It is a measure of demand sensitivity.

SAM Model: Successive Approximation Model has three steps: analyze, design, and develop. It is an iterative approach to creating interventions that allow for constant feedback from project sponsors, including subject matter experts and users.

Subject Matter Expert: This is a resource that can provide insights, including expert and technical support during the development and evaluation of the intervention.

APPENDIX: QUESTIONS FOR DISCUSSION

1. What are the strengths and weakness of the design and development approach used by the team?
2. In this case, basic assumptions were made to expedite the development and delivery of the intervention. What are the risks associated with this approach? How can those risks be mitigated?
3. What are the advantages and disadvantage of using pedagogical agents in an intervention such as this?
4. What might the impact on the project be from the addition of a new team member midway through the project?
5. How can peer to peer learning be facilitated and scaffold in this environment?
6. Are the feedback loops adequate for this project? If so, why? If not, what would you recommend?
7. Which design model would you have used: ADDIE or SAM? Why?

Chapter 13

Capitalizing on Franchisee Know–How: A Restaurant Chain Engages in Benchmarking

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EXECUTIVE SUMMARY

While the current labor market is a dream for aspiring future employees, the low unemployment rate and the pervasive availability of hourly jobs makes it much more difficult in the quick service restaurant industry for employers. Hiring and retaining a solid team is a common concern across the industry; often it is easier to hire than to retain. Entry level employees are easily persuaded to work for a competitor for very little added pay. This current phenomena requires organizations to find differentiating tactics to retain their workforce. This case study explores a franchise restaurant chain in their quest to become an Employer of Choice in this very competitive industry. Franchise consultants were hired to explore best practices. The authors detail how a benchmarking tool was used to secure the information as well as the outcomes of the study. Specific actions are cited that can improve the retention of hourly employees in the quick service restaurant industry.

DOI: 10.4018/978-1-7998-0054-5.ch013

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ORGANIZATION BACKGROUND

Pop's Burgers and Custard is a quick service restaurant chain with over 2,500 locations in the U.S. This franchise concept has been operating restaurants since 1978. Candi Boyd and her late husband Lester opened their first restaurant in St. Paul, Minnesota and found early success. The strong performance of their small business can be attributed to Lester's grilled burgers, Candi's frozen custard, and a core emphasis on friendly service that included unique signature actions, such as providing free small cones to all children. After several years operating their own restaurant, the Boyds decided in 1980 to expand by using the franchise business model. They were so successful that by 2014, there were over 2,500 Pop's Burgers and Custard restaurants operating with 2,000 owned and operated by franchisees and the other 500 restaurants operated by corporate headquarters. The Boyds were selective in who could buy a franchise and prospective franchisees had to be vetted for fit within the system.

For context, franchise systems operate in numerous business categories (e.g., automotive, lodging, beauty, personal fitness, etc.), but most franchise business models are commonly associated with the quick service food segment due to omnipresent chains such as McDonald's, Wendy's, Dairy Queen, KFC, and Taco Bell. In a business format franchise, there is an organization (the franchisor) with a market-tested business package centered on a product or service. The franchisor enters into a continuing contractual relationship with the franchisee, who agrees to operate under the franchisor's trade name to produce and/or market goods or services according to the format specified by the franchisor (Stanworth & Curran, 1999); in turn, the franchisee agrees to pay an ongoing fee to the franchisor. Today, franchising accounts for more than \$713 billion of economic output for the U.S. economy and represents a considerable proportion of the workforce, employing over 8.1 million people (International Franchise Association, 2018).

Brand standards are the bedrock of franchising, and consistency and control comprise the foundations of the franchise model (Cox & Mason, 2007). Some uniform business functions, such as supply chain management and marketing, benefit the franchise system through cost efficiencies, quality control, and uniformity of the brand image. These are frequently controlled and monitored by the franchisor. Human Resources (HR) is typically an area where franchisees have more autonomy (Cox & Mason, 2007; Kaufmann & Eroglu, 1998). What the franchisor's HR department can and cannot provide their franchisees is complicated by the law, not to mention the relationship between these two groups. This matters because Human Resource Management (HRM) practices are a critical driver of success in franchising at the

unit and system level (Brand & Croonen, 2010; Castrogiovanni & Kidwell 2010; Grunhagen, Wollan, Dada, & Watson, 2014). HRM encompasses the policies and practices around job analysis and design, recruitment and selection, staffing levels, training and development, performance management, pay structures and incentives and benefits, as well as labor and employee relations and management (Noe, Hollenbeck, & Gerhart, 2003). The role of the corporate (franchisor) HR department, the role of the franchisees, and the use of a benchmarking strategy to influence HRM practices at the restaurant unit level are all central to this case study.

SETTING THE STAGE

Franchise Systems – HR Legal Issue

In the franchise sector, the franchisor will typically offer initial training to new franchisees. This training is designed to help new franchisees develop specific knowledge about the franchise system that is important to running a successful franchised unit. The training is focused on the franchisor's standards to operating the business (Judd & Justis, 2008). Typical training for new franchisees covers operations (standards), service, and a topline review of management personnel. Many large franchisors have institutionalized these training programs and even branded their training and development enterprises, such as Hamburger University (McDonald's), Yum! University (KFC, Pizza Hut, and Taco Bell), and Blimpie University. The majority of franchise systems operate on a smaller scale than the aforementioned brands, with an average of just 377 units and fewer resources available for human resource training (Castrogiovanni & Kidwell, 2010). The original owners of Pop's, Candi and Lester, took a hands on approach to training and ensured the corporate headquarters team was continually in the field assisting franchisees with standards-based training.

Within the HR function, it is standard practice for franchisors to steer clear of dictating human resource policies and practices to their franchisees. When franchisors intervene in their franchisees' HR practices, they risk blurring the boundaries of who is considered the employer. Being viewed as a "joint employer" places the franchisor in the position of possible litigation should a franchisee violate the law. Hence, franchisors are more likely to leave franchisees to determine the means to meet the established employment standards when running their businesses (Grunhagen, Wollan, Dada, & Watson, 2014). The franchisor avoids stating standards that sound like workplace rules, and franchisees are given discretion for determining hiring, firing

Capitalizing on Franchisee Know-How

and other disciplinary measures, as well as autonomy with respect to HR practices, including schedules and pay (Kellner, Peetz, Townsend, & Wilkinson, 2016).

Proven ways of organizing and managing people enables a business to provide a more satisfying work experience for its employees (Cheng-Hua, Shyh-Jer, & Shih-Chien, 2009). Ideally, franchisors would do more than just ensure their franchisees understand how to comply with the law and simply execute a standard set of practices. In a tight labor market, with increasing competition and changing customer demands, franchisors would find it beneficial to provide their franchisees with strategies to influence employees' attitudes and behaviors that could help reduce turnover.

Franchise System – Relationships

Having a strong franchisor-franchisee relationship requires the franchisor to develop a culture that supports the franchisee. The quality of the relationship is critical to realizing organizational goals. King, Grace, and Weaven's (2013) study found the "human element" important to effectively transferring brand knowledge. Building brand champions among franchisees requires franchisors who are interested in the views of their franchisees.

Successful franchise systems not only leverage knowledge transfer from franchisor to franchisees, but also from franchisees to franchisees (Perrigot, Herrbach, Cliquet, & Basset, 2017). The transfer of knowledge in franchise networks can be handicapped when there is a lack of trust, poor vertical communication between franchisor and franchisees, perceived competition between the franchisor and the franchisees, cultural barriers, and in mature systems that have undergone ownership changes (Cumberland & Githens, 2012). Franchisees who buy into a system under one owner often struggle when the franchise is sold. Change in corporate ownership, particularly when the owner was the founder, may create angst and suspicion among franchisees. When suspicion and conflict operate in a franchise system, it hampers the ability of the franchisor from gaining alignment on a strategic direction (Davies, Lassar, Manolis, Prince, & Winsor, 2011).

CASE DESCRIPTION

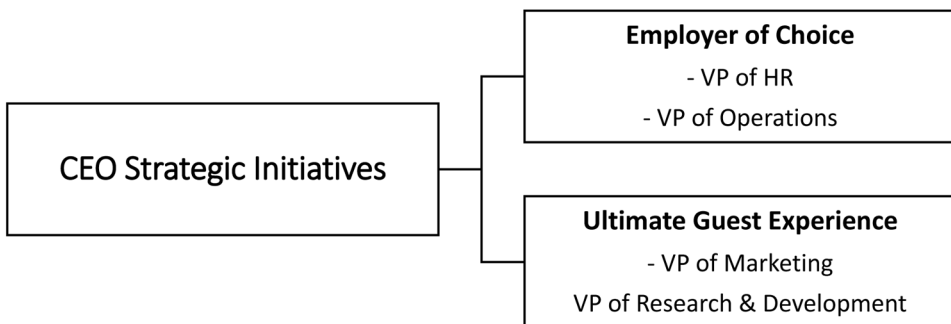
The Boyds sold the franchise to venture capital firm Axis, Inc. in 2014. The CEO brought on board to lead Pop's opted to drive up share price by selling or shuttering all 500 of the corporate-owned restaurants. Both existing and new franchisees were offered the opportunity to purchase corporate restaurants for a reduced franchise

fee; by the end of 2014, most corporate stores had converted to become franchisee units. Unfortunately, many of the corporate-owned stores had been underperforming, and about half of these restaurants went out of business in the first year. Given the debacle, Axis, Inc. was now dealing with a very angry group of Pop's franchisees. They brought in a new CEO, Dean Owens, who had twenty years of quick service restaurant experience in the franchise arena. Owens understood the value of delegating authority to franchisees. Rather than tightening control, Owens wanted to delegate decision-making authority to franchisees to increase their incentive to acquire information and facilitate their participation in the contractual relationship (Mumdziew & Windsperger, 2013).

Owens was a staunch disciple of Bill Marriott's philosophy, *"take good care of your employees and they'll take good care of your customers."* Working with a group of seasoned Pop's franchisees, Owens established a strategic initiative for Pop's to become the "Ultimate Guest Experience." The Vice President of Marketing and the Vice President of Research and Development were given the mission of crafting a customer experience that guests would rave about, while the Vice President of Operations and Vice President of Human Resources (HR) were charged with turning franchisees' restaurants into locally recognized Employers of Choice. An Employer of Choice is one that uses tangible and intangible HR practices to recruit, engage, and retain its team, based on the belief that an exceptional workforce provides a competitive advantage (Branham, 2005; Lenaghan & Eisner, 2006). Below is a depiction of the two strategic initiatives:

Lynne Jenkins, Vice President of Operations, managed franchisee field operations and had worked with franchisees at Pop's for the last ten years. The Pop's chain is divided regionally into eight territories, and eight Franchisee Business Coaches

Figure 1.



Capitalizing on Franchisee Know-How

Table 1.

Role	Name	Core Responsibilities
CEO, Axis, Inc. (Franchisor of Pop's Burgers & Custard)	Dean Owens	Defines strategy of organization and ensures execution.
Vice President of Human Resources	Andrew Belkin	Accountable for all employment issues at the corporate headquarters; leads training efforts for new franchisees.
HR Director	-	Responsible for Operations Manual accuracy regarding HR guidelines mandated by law; accountable for Training and Development for new products and other store initiatives.
HR Generalist	-	Manages corporate employment issues and performance management process.
Vice President of Operations	Lynne Jenkins	Manages franchise field operations and oversees 8 regional territories; develops strategies to drive employee and guest satisfaction.
Franchisee Business Coaches (FBC).	-	8 FBCs are responsible for tracking Pop's franchisee key performance indicators (KPI's) and assisting franchisees in driving sales; serve as liaison between corporate and franchise system.

(FBCs) were accountable for assisting franchisees in each of those territories. FBCs are a resource franchisees can use to identify opportunities to improve business performance, as well as a mechanism for the franchisor to ensure satisfactory compliance with brand standards.

The Vice President of Human Resources, Andrew Belkin, is new to franchising, but had 15 years in human resource management experience. The HR team at Pop's corporate office included Belkin, one HR director, and one HR generalist who supported headquarters staff. Since Pop's did not operate corporate restaurants over the last several years, the corporate HR department was intentionally lean.

The HR corporate team had two areas they managed. First they were accountable for the HR policies of Axis, Inc. (the franchisor corporation), which included the human resource needs of its corporate employee staff. The second area was providing HR Training and Development for new franchisees entering the system. This training was overseen by the HR Director, who worked with the Operations Team closely to ensure the Operations Training Manual included all of the necessary employment guidelines mandated by law. In addition, the HR Director was responsible for the initial training program that all new franchisees attend. Below is a description of the corporate players:

When Jenkins and Belkin met to brainstorm how to turn the Pop's brand into an Employer of Choice, they aligned on crafting a strategy that would encourage a culture of continuous improvement among franchisees. They devised a straightforward 2-step plan. The first step would be to conduct an internal benchmarking study. The second step would be to communicate the best practices identified from the benchmarking effort to all franchisees.

The Benchmarking Process

Benchmarking has become an indispensable tool for human resource professionals (SHRM, 2016). It is defined as a search process for the best practices that produce superior improvement (Camp, 1989; Yasin, 2002). Benchmarking exercises begin with the identification of activities to be benchmarked and end when the new practices are adopted or adapted (Nath & Mrinalini, 2000). Benchmarking emerged in the early 1980s when the CEO of Xerox championed the approach as a powerful competitive tool that could measure gaps in performance and identify solutions to help an organization achieve competitive advantage (Zairi, 2010). Practitioner and scholarly examples of benchmarking cases have appeared since that time covering numerous industries including healthcare, construction, manufacturing, food service, hospitality, banking, and real estate, as well as examples from nonprofit organizations and governmental entities (Yasin, 2002). Today, benchmarking is widely viewed as a method of continuous quality improvement across sectors (Ettorchi-Tardy, Levif, & Michel, 2012). A prolific amount of benchmarking literature has also delved into specific functional silos inside organizations, including research and development, marketing, information management, operations, and human resources. Improving processes and addressing major strategic issues appear as the top two reasons for undertaking benchmarking activities (Adebanjo, Street, Mann, & Abbas, 2009).

Benchmarking can be segmented as external or internal (Yasin, 2002). External benchmarking focuses on an examination of competitors' products, processes, or practices, while internal benchmarking compares how operational processes or practices occur within the same company. Both approaches are key components in continuous improvement efforts and total quality management programs. Benchmarking offers an ideal technique for inter-organizational firms where best practices from across divisions or units can be shared. Similarly, franchise chains, characterized by social contracts among franchisees, will also benefit when knowledge created at the unit level is combined and shared with the entire system (Cumberland & Githens, 2012; Pawan & Wittman, 2009).

Belkin believed an internally-focused benchmarking study would benefit the system. Jenkins agreed, but suggested an outside consultant would offer the franchisees anonymity so they would be more comfortable being candid about their HR practices. This is where the two authors enter the picture. Two former franchise executives who consult for franchise organizations were hired to conduct the benchmarking process. During the first conference call between the clients and authors, it was decided that a benchmarking study be used as a structured learning process. The three-stage approach for the benchmarking activity would include the following:

- **Stage One - The Search Stage**
 - The client would locate those franchisees who would serve as Employer of Choice role models that could be interviewed. The client would develop criteria that included business results critical to the franchise, then evaluate the performance of each franchisee with that criteria.
- **Stage Two - Data Collection and Analysis**
 - The client and authors agreed that the number of franchisees to be interviewed would have to be assessed once stage one was completed. This would result in the identification of best practices that contributed to superior performance. The Society of Human Resource Management (SHRM) literature would be reviewed to identify specific HR practices linked to retention, as a form of triangulation. The work product would be a best practice compendium that could be provided to franchisees.
- **Stage Three - Dissemination of Best Practices**
 - Communication of the findings to the franchise system.

Stage 1: The Search Stage

Jenkins conducted a two-day workshop with the eight FBCs. Each FBC was required to bring the metrics they track for each franchise restaurant. The goal was to identify pockets of success, as well as areas of high concern and compare the measurements to ascertain if there were possible reasons for positive or negative performance. The review and analysis of the performance metrics by region, and by store, revealed that stores with higher team turnover were performing poorly with respect to numerous metrics, including cleanliness, friendliness, speed of service, and sales. Conversely, stores with higher team member retention showed stronger scores across those same measures. FBCs acknowledged in the workshop that they had only a rudimentary idea of what the high performing units were doing to lead their teams at the store. A total of 75 franchisees met the selection criteria of being an Employer of Choice role model.

Stage 2: The Data Collection and Analysis Stage

The authors were provided a lengthy list of benchmarking questions from the client. Since the interviews were 45 minutes, prioritization of the questions ensured multiple topics were covered. Consistent with an appreciative inquiry framework, questions were phrased in a manner to explore what the franchisees were doing successfully in their units to create a positive team culture. This was done to capture the “best of what is” operating. The participants were sent the interview questions in advance to allow the franchisees time to reflect and provide specific examples. A total of 25 in-depth interviews with franchisees occurred via telephone. Interviews lasted between 40 – 50 minutes and were recorded. The interviews were transcribed verbatim by a professional transcription service. The questions served as initial a priori codes. The text of each interview was analyzed by repeated readings and the themes that emerged were displayed in the margins of the transcripts. Constant comparative analysis (Miles and Huberman, 1994) was used to isolate those HR practices that occurred most frequently.

After synthesizing insights from the field interviews with those from the SHRM literature, six distinct HR practices surfaced as probable influencers to employee retention. These included the following:

1. A culture that valued people.
2. An emphasis on communication.
3. Use of flexible scheduling.
4. Exploring innovative hiring approaches.
5. Engaging in training and development.
6. Use of performance management policies tied to compensation.

People Oriented Culture

These interviewees had all created cultures that were family oriented and nurturing, team oriented, and focused on having fun and celebrating achievements. Key drivers for building this environment included clarity around expectations, recognition on a regular basis, being sensitive to employee needs (particularly with schedules), and an investment in training to help employees develop. This dovetails with the literature on Employers of Choice in industries where jobs are characterized by high levels of customer interaction, repetitive in nature, and have low wages (Hinkin & Tracey, 2010).

Capitalizing on Franchisee Know-How

Interviewed franchisees reported that they spend time, energy, and money driving employee engagement with specific examples:

- Ensuring all team members are provided their job role training completely within 4 weeks.
- Providing regular feedback on performance.
- Adjusting schedules to the needs of their team members.
- Holding team outings (e.g., movies, games, and dinners).
- Having parties at the store.
- Presenting awards (e.g., pins, gift cards, bonuses, and food treats).
- Holding competitions/contests with prizes.

Franchisees also identified no/low cost ways to recognize and celebrate employees:

- Offering paid breaks.
- Posting positive customer comments.
- Giving shout-outs at meetings.
- Leveraging social media to “rave” about employees mentioned by customers.
- Sending personal thank you notes sent to the employees’ homes.
- Creating named awards (e.g. Scrambler Award).
- Recognizing birthdays, anniversaries, and holidays with food and fun.
- Creating a festive environment at the holidays with decorations and food.
- Using specific places on communication boards (STARS; WOWs etc.) to post pictures and recognition notes.
- Celebrating on prom night with pictures at the store.
- Celebrating graduations with a cake and balloons.
- Seeking employees’ ideas for improving sales and morale.

When asked about their approach to leadership, it was evident that many of these Employers of Choice franchisees used a servant leadership model:

- *My employees owe me nothing. I owe them everything. I serve my employees. Our job is to serve our employees so they can serve our customers. So we give our employees the same treatment and attention that we give our customers. This develops loyal employees.*
- *I work with them every day so I can tell when things are wrong. My job is not selling custard, it is making my staff happy. If they are happy, my customers are happy.*

- *These are first time employees and we are training and teaching them how to be an employee, this is how work looks, this is what it means to be a team member. This is their first job, so my goal is to help them.*

Communication

The franchisees were asked to share how they communicate with their team members at the restaurants. While there were differences in meeting practices, all had found ways to keep employees “in the know” with the following ideas shared:

- Having regular crew meetings that included clear agendas, team building games, food, videos, training, and dialogue.
- Using daily pre-shift huddles and “Appreciative Meetings”.
- At a minimum, having the leadership teams (Managers and Assistant Managers) meet with the franchisees to discuss operations.

Communication tools other than meetings included the following:

- Use of communication boards at the store.
- Use of social media (e.g., Scheduling Apps, Social Team apps like Crew, and Facebook Groups).

This finding, that ensuring communication occurs at the unit level, was supported in the SHRM literature as a key driver to employee engagement.

Creative Staffing Approaches

While some of these franchisees were struggling with finding employees, others were not. Franchisees shared the following ideas with respect to best in class hiring practices:

- Meet the parents and share expectations.
- Be flexible in scheduling; hire the person who is great, but can only work 2 nights a week.
- Aim for students who are strong academically and highly involved in other activities.
- Spend time asking questions that give insights into the personality of the student.

Capitalizing on Franchisee Know-How

- Involve the full team in the interviews and have a team building activity.
- Get the team to recommend friends and family.
- Ask school counselors and local church youth pastors for recommendations..

Training and Development

These franchisees had various approaches to on-boarding and training new employees, but all recognize the importance of an established orientation program. The following ideas were promoted by these franchisees:

- Use a check-list of items to cover in the first 3 weeks to ensure every new hire's experience is consistent.
- Ensure that during the first 20 hours the new hire is not thrown into the fire.
- Provide the new hire a welcome package with their uniform.
- Meet the new hire at the door on their first day, conducting a walk through, and introducing them to each of the team.
- Ensure the new hire has a trainer who is experienced.
- Contact them afterwards to see how it went.
- Meet with the new hire to get to know them as a person.
- Use random testing that is designed to ensure they are successful.

These franchisees varied on their thoughts about cross-training the entire crew, but all ensure those in any leadership roles are cross-trained. Development of their teams was a high priority as it does result in more engaged employees.

Flexible Scheduling

Most of these franchisees worked hard to provide employees the schedules they needed, allowing as much flexibility as possible. Some scheduling practices offered:

- Do not schedule high school students for more than one weekend night.
- Allow for schedule changes even after the schedule is posted, but the onus is on the employee to find the replacement, and the replacement needs to be approved by the manager or franchisee.
- Be innovative and flexible with full time crew-members (e.g., coming in very early to leave early or leaving to pick up a child and then returning).

- Allow parents to take multiple weeks off at a time during Christmas and during the summer.
- Give college students jobs back at the holidays and during the summer.
- Use a scheduling App as a replacement to posting a schedule in store.

Performance Management

Advancement opportunities vary, but these franchisees tend to promote from within. Compensation approaches also varied, but many either tie raises to achieving certifications or are tied to overall performance. Bonuses are often employed for managers, but one franchisee has been able to tie the manager's bonus structure with a bonus opportunity for the crew. There are other incentives available including the following:

- A number of franchisees mentioned they offer some type of vacation, but policies varied.
- A few offered healthcare plans.
- Some had given loans to employees.
- Franchisees were divided on cell phone usage policies. None allow team members working at the front counter to use. Some required the employee leave the device in their car, while others allow them to bring the phone into the store, but had rules on where and when they could be used.

Stage 3: Dissemination of Information

After the presentation of the findings contained in the Benchmarking HR Report that the authors shared with the two teams (HR and Operations), a brainstorming session between the two groups was conducted to determine how to disseminate these best practices. The two teams met in a half-day session that the authors facilitated and created an action plan for how to communicate these HR practices and initial ideas to build a culture of continuous improvement. The following first steps were agreed upon:

1. Share the findings with the 25 franchisees who were interviewed and seek their input before sharing broadly. Determine if any of the suggestions should be removed or edited. Also, seek their ideas on how to communicate the findings to the system.
2. Create a presentation for the Pop's Annual Convention that shared how the benchmarking technique was employed. Create a booklet that would be branded:

Capitalizing on Franchisee Know-How

Pop's Employers of Choice: HR Best Practices that would be shared with all attendees at the convention.

3. Have the CEO introduce the new *Pop's Employers of Choice* program, letting attendees know that everyone would receive the new HR booklet. Also communicate that a Steering Committee was being established to focus on the tactics needed to build a culture of continuous improvement; the goal is that every restaurant in the Pop's system takes care of our team members who, in turn, take care of our customers.
4. Charge the new Steering Committee to create a dashboard of talent management metrics to be used to identify *Pop's Employers of Choice*. While every organization must attract, select, engage and retain talent, there are a variety of measures that can be used to track progress (e.g. average days to fill vacancies, first-year turnover rate, training hours per employee, etc.).
5. Ensure the FBCs are ambassadors of the program at franchise conferences, team meetings, and individual one-on-ones with franchisees. Their role would be to educate franchisees on retention targets, encourage them to try different best practices shared, communicate with members of the steering committee and ultimately become recognized as a *Pop's Employers of Choice*.
6. Have the HR team create the *Pop's Employer of Choice* website on the intranet. This site would serve as both a vehicle for communicating the names and contact information of the franchisees who are designated as *Pop's Employers of Choice*, and also contain HR ideas in a searchable format that could be continually be expanded.

CURRENT CHALLENGES FACING THE ORGANIZATION

A robust job market with low unemployment means retention will remain an important issue in the quick service restaurant industry. SHRM reports that each employee departure costs a company about one-third of that worker's annual earnings. Companies in the service sector, like Pop's, are particularly vulnerable to a tight labor market as employees in these jobs can be attracted to small increases in compensation. Therefore, the quest must remain on uncovering HR practices that lower turnover and improve employee retention. Ultimately the longer range strategy of creating an environment in which employees want to work, and feel valued at work, is a critical strategy that Pop's should continue to pursue.

The complexity of employment matters will also remain a challenge in franchising. If a franchisor inadvertently provides inaccurate information, they risk franchisees seeking compensation for damages. Further, if they intervene too strongly, they risk being considered the legal employer of the franchisee (Kellner, Peetz, Townsend & Wilkinson, 2016), again becoming a target for possible litigation. To avoid liability, franchisors will have to devise unique methods to assist franchisees with HR support. One such idea is leveraging franchisee best practices and promoting interaction among franchisees. Franchisee-developed knowledge about specific HR tools and tactics that is shared across the system helps the franchisor avoid the joint employer liability issue.

Finally, when there is conflict in the franchisor-franchisee relationship, it reduces the level of trust between the partners. Trust is a critical element in the relationship. Studies have shown that when franchisees trust their franchisor, it reduces opportunistic behavior (Dickey, McKnight, & George, 2007), positively influences compliance (Davies et al., 2011), and improves franchisee satisfaction (Brand & Croonen, 2010). Hence, franchisors seeking to motivate and influence franchisees must build a governance relationship based on trust that encourages both autonomy and knowledge-sharing.

RECOMMENDATIONS FOR THE FUTURE

For the Pop's system to become an employment brand, whereby franchisees are viewed in local markets as Employers of Choice, the following suggestions are offered.

First, the franchisor should continue to encourage franchisees to develop their own hybrid Employer of Choice model by selecting the approaches to human resources that best fit their situation. Not every HR practice will be the right practice for every franchisee. The strategies adopted may need to be based on the age of the franchise (mature vs. young), the geographic location (urban, suburban, rural), and/or the number of units owned by the franchisee (single-unit vs. multi-unit), etc. While franchisees do have commonalities, to assume a one-size fits all approach where there is a universal set of HR best practices, would likely backfire (Kellner, 2017).

Second, the franchisor should continue to invest in ongoing formal benchmarking processes within the Pop's system. This conclusion is supported by empirical evidence that has found organizational commitment to benchmarking and prior use of benchmarking are positively related to firm performance (Maiga & Jacobs, 2004). Furthermore, benchmarking could act as a buffer of the effects of adverse

Capitalizing on Franchisee Know-How

conditions that occur in a competitive business environment (Sanchez, Kraus, White, & Williams, 1999). As the majority of large organizations adopt their own benchmarking model (Adebanjo, Abbas, & Mann), there is an opportunity to repeat the current approach every year, layering in new franchisees to interview who have earned the *Pop's Employer of Choice* designation. The process could also be augmented with a telephone survey using a modified version of the "High Involvement Human Resource Practices Scale" (Sanchez, Kraus, White, & Williams, 1999) that determines how many franchises are using specific approaches to training and development, compensation, and performance evaluation. But, regardless of whether data is obtained from interviews or a survey, there is bound to be some subjectivity or bias. One way to address the bias would be to canvass actual franchisee team members in a benchmarking exercise to find out what practices are being employed that they value and that builds loyalty to their franchisee.

Third, support and promote the newly establish Steering Committee that is leading the *Pop's Employers of Choice* effort. When franchisees seek advice among themselves, it enhances the quantity and/or quality of the input received, and it is more cost-efficient for the franchisor (Meiseberg, Mignonac, Perrigot, & Akremi, 2017). This group must be recognized as experts that other franchisees in similar situations (e.g., with respect to market size or number of units), can reach out to for one-on-one conversations. This is not a "magic bullet," and the corporate office must provide incentives and resources to this Steering Committee.

Fourth, The Pop's corporate office adds to the intranet an Employer of Choice Benchmarking Library. This site would contain best practice HRM literature, the *Pop's Employers of Choice: HR Best Practices* compendium, and the franchisees who comprise this group are listed with contact information.

Fifth, locate franchisee champions who have adopted some of the HR practices being promoted and track their results. FBCs can ask these franchisees to voice their results publicly at meetings.

Sixth, the franchisor CEO, Dean Owens, should also develop a recognition award for franchisees who earn the *Pop's Employer of Choice* designation. This recognition should be given at a public venue, such as the annual convention. To continually seed Bill Marriott's mantra that "if you take care of your employees, they will take care of your customers," Owens will need to maintain uncompromising focus on the new initiative of leveraging franchisees for their HR best practices and driving commitment to the *Pop's Employer of Choice* program.

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KEY TERMS AND DEFINITIONS

A Priori Coding: A process of coding qualitative data whereby the researcher develops the codes ahead of time based on a theoretical framework, the interview question, or pre-existing knowledge.

Benchmarking: A popular business management data collection tool applied to a wide variety of processes and products in all types of industries to identify and replicate “best practices” to improve performance.

Employer of Choice: An employer of choice recruits and engages talent through practices that 1) address both tangibles and intangibles, 2) focus on the long term as well as the short term, and 3) are tailored to the organization.

External Benchmarking: Looking outward (e.g., examining a direct competitor or best-in-class industry leader) to uncover best practices.

Franchise Business Model: A method of business expansion characterized by a trademark license, payment of fees, and significant assistance and/or control.

Franchisee: The individual or individuals who own or operate a business using the franchisor’s trademark or trade name.

Franchisor: The person or company that owns the trademarks or trade name and grants the franchisee the right to do business under that trademark or trade name.

Human Resource Management: The practice of recruiting, hiring, deploying and managing an organization’s employees.

Human Resource Practices: Efforts used by organizations to influence and shape the skills, attitudes, and behavior of individuals to do their work and thus achieve organizational goals.

Internal Benchmarking: Looking within one organization about the performance of similar business units or processes for ideas.

Joint Employer: This status occurs when two entities share or co-determine the essential terms and conditions of employment (including conditions of employment such as hiring, firing, discipline, supervision and direction).

Steering Committee: An advisory committee usually made up of high level stakeholders and/or experts who provide guidance on key issues.

APPENDIX 1: QUESTIONS FOR DISCUSSION

1. Why does a franchisor (or any type of organization with multiple owners) have to be careful in how they address human resource issues?
2. What are some of the reasons the franchisees of Pop's might not want the franchisor to be involved in their HR practices?
3. What are some of the steps the new CEO, Dean Owens, is taking to turn around the business?
4. Why was an internal benchmarking process to gather best practices from franchisees, an ideal way to launch the Employer of Choice initiative?
5. What other ideas can you offer for the dissemination of best practices to aid franchisees in becoming Employers of Choice?

APPENDIX 2: EPILOGUE AND LESSONS LEARNED


While the complexity of employment matters will remain a challenge in franchising due to joint employer regulations and the relationship between the franchisor and franchisees, the ability to become an Employer of Choice is a viable strategy for any brand. The wealth of information available inside the system from franchisees who are “doing it right” can be leveraged. What is critical, however, is ensuring that the franchisor and franchisees understand that there is not a “one right way,” where there is a universal set of HR best practices. Lessons from this case study include the following:

1. Understanding of the business context is key. In this case, the franchise context has joint employer regulations to navigate, as well as new ownership that can impact attitudes.
2. Ensuring stakeholders are included in building strategic initiatives is important.
3. Internal benchmarking is a viable tool that enables capturing and sharing best practices.
4. Use of external consultants to conduct the benchmarking exercise may help ensure candid conversations.

Chapter 14

Leading Edge Training for Leading Edges: Experiential Learning to Improve Human Performance and Product Quality

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EXECUTIVE SUMMARY

Ruben, the learning and development manager for Aerosector, was tasked to help the composite manufacturing team increase their production rate and lower the defect rate for the manufacturing of composite leading edge parts for a newly designed aircraft. Initially, it took approximately 28 days to build one of the parts, and the defect rate for the parts was over 30 percent. Ruben put together a cross-functional team to devise a solution that would decrease the production rate of the parts to 15 days or less and reduce the defect rate to less than 0.5 percent for non-repairable defects and less than 2 percent for repairable defects. After performing a gap analysis, the team came up with the solution to build a training class utilizing experiential learning to quickly increase performance in the shop and meet the build requirements.

DOI: 10.4018/978-1-7998-0054-5.ch014

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ORGANIZATION BACKGROUND

Aerosector is the high technology aerospace section of a larger corporation. Aerosector builds prototypes and designs leading-edge aerospace vehicles (i.e. - airplanes). The aerospace vehicles manufactured by Aerosector are technologically advanced and built to meet the specific needs of their Department of Defense (DOD) clients. Their products are often considered the most technologically advanced in the world. Aerosector primarily works with the United States Department of Defense to manufacture air vehicles to meet the needs of their DOD customer. Aerosector and its parent corporation also sell to international countries and continually look for ways to grow in the countries they partner with.

Along with selling to international countries, Aerosector has multiple international manufacturing locations. The manufacturing plants create well-paying jobs. In turn, these international locations help Aerosector meet the needs of multiple countries and build complementary relationships with those countries. Aerosector is always looking for ways to further their relationship with the DOD and the other countries.

Organizational Culture

Aerosector builds high-tech products that stretch the realm of possibility. People who work there are expected to have high standards and work with excellence. The culture within Aerosector is high-stakes, high-stress, and high-competition. Aerosector uses a team-based approach for problem-solving. The purpose of the team-based approach is to have perspectives from multiple organizations to speak into any high-stakes issue or solution. This utilization of the team approach is used to help minimize any unintended consequences stemming from decisions being made from individuals who may not have a complete perspective.

The high-stress environment often creates competitions within internal Aerosector teams. This competitive culture gives Aerosector an advantage in the competitive world of DOD contracts. This environment also creates some communication barriers within Aerosector such as teams not communicating or sharing information with other teams because one team wants to have an advantage over another team.

This type of culture did not just appear. The organization has a rich history that has been cultivated through years of innovation and meeting customer needs in ways that many people say “changed the game.” Aerosector has created hundreds of new technologies and proved them on several of their aircraft. It was important for Aerosector to cultivate this culture and ensure the culture continued to evolve because the competitive nature of the organization is what drives the innovations created by the organization.

SETTING THE STAGE

The composite manufacturing team at Aerosector was selected to manufacture and build the leading edges for the wings of the three variants of the same aircraft. Leading edges are the very front section of the wings. The composite shop will now build thousands of parts instead of single parts. Aerosector has primarily built prototypes for testing. There is a large difference between creating single parts for a prototype vehicle and creating thousands of the same parts in a manufacturing environment. The initial leading edges built for the three prototypes were all built and fitted completely by hand. Building and fitting by hand mean each part was unique to the aircraft for which it was built. Building this way is typical for prototyping but not feasible for manufacturing because manufacturing requires a well defined, repeatable, and consistent processes that deliver consistent parts.

For the shop to successfully transition to manufacturing composite parts at the required pace, the composite shop had to physically transform the workspace for efficiency. This physical transformation is only part of the performance equation. People are the other part of the equation. Aerosector has to equip their employees to meet the challenges and requirements that are unique to the manufacturing environment. This is the reason Ruben, the L&D manager, was tasked to assist the composite team with increasing production rates and decreasing defect rates.

Ruben knew a team would be needed to define a solution because of the multiple organizations that speak into the manufacturing of the parts. Without input from these organizations, there was a high possibility that a solution, especially any possible training solution, would not have the expected outcome of reducing manufacturing time and defects. The best possible solution would incorporate a cross-functional team from the multiple areas that affect the manufacturing of the leading edges. For this reason, Ruben chose to contact Dennis, the director of the composite manufacturing area, to get his approval for using people from his team and to help identify who from the supporting shops should be a part of the team.

Forming the Team

Ruben and Dennis discussed multiple ideas and concepts to help the process move forward. After talking through some ideas, they came up with a way forward they believed would reap the most benefits for the manufacturing team. Dennis agreed to have one person form manufacturing engineering, planning, and production operations to be formal members of the team. Ruben agreed to utilize three people from learning and development participate on the team.

They also discussed who would best fit on the team and what their role would be on the team. From this conversation, the cross-functional core team was created. Other individuals within the different organizations could be brought onto the team for limited times in order to help work through specific issues.

The Core Team

- **Ken:** Learning and Development - Team Lead
- **Bob:** Lead composite trainer
- **Annette:** Curriculum designer
- **Ben:** Manufacturing Engineer
- **Steve:** Planning
- **Patsy:** Production Operations

When the core team was formed, Bob, the lead composite trainer was not the leader of the team because much of his time would be spent in the shop working with the composite team. The team leader had to dedicate the majority of their time to the analysis, creation, and implementation of the solutions. Ken was chosen to be the team leader because of his previous experience with manufacturing and learning and development.

CHALLENGES FACING THE ORGANIZATION

There were three primary challenges facing Aerosector.

- Hire and train enough new employees to meet the manufacturing requirements. The size of the composite shop essentially needed to double in order to meet the manufacturing rate. There was a lack of trained composite technicians needing work. This meant that some of the new employees would be hired with no experience.
- Current employees needed to change their mindset from prototyping to manufacturing. Composite technicians with a prototyping mindset will make hand adjustments to parts in order for the part to meet specifications. A typical hand adjustment may be as simple as adding epoxy to an area in need of epoxy. This is fine when only 2 or 3 of the same part is being built. When 10,000 of the same part are being built, the time it takes to make hand adjustments

is simply too expensive. The manufacturing process has to yield consistent results.

- The lack of communication between teams due to the current organizational culture of competition.

CASE DESCRIPTION

Ruben and Dennis brought together the core team as well as others who may end up participating on the team in some capacity for a kick-off meeting. This was done in order to start the team with a clear mission, direction, and structure. Everyone was introduced and their roles were specified. This was a fairly simple task because everyone knew each other. Defining the roles and clarifying the mission of the team was the critical aspect of the kick-off meeting. The mission of the team had to be clear because of the urgency of the need. There was limited time to transform the composite shop into a manufacturing shop in order to meet customer requirements.

Ruben and Dennis started the meeting by defining the mission and the parameters that needed to be met. They also defined the roles of each participant then handed over the meeting to Ken, the team lead. At this time, conversations started to take place as they generally do in meetings. Rather than limit the conversation, Ken, the team lead, used this as an opportunity to have a small brainstorm type of session to just see what everyone felt about the issues and get their perspective on the best ways to approach the issues. During this session, a constant theme came up over and over. The theme was that the people in the shop and people coming into the shop needed experience working with the specific materials and tools they will use in the shop. They needed to put their hands on actual materials and products they will be using in the shop.

The initial focus on hands-on experiential training is a direct link to experiential learning as defined by Tiessen, Grantham, and Cameron (2019), “Experiential learning” is an umbrella term used to describe an array of approaches to practice-based education, usually involving student placements in a workplace or organization in their field of study. In this case, the team was continually bringing up the point about the value of the new employee experiencing what the work would be like in the shop prior to the employee entering the shop.

Leading Edge Training for Leading Edges

The learning and development team members understood the high value of learning through an experiential, hands-on process. Ken also knew that the training could be confusing and inconsistent if there was no defined structure to the training. The possibility of inconsistency within experiential learning is documented well. Kolb (2014) states “when experiential learning is defined as a naturalistic ongoing process of direct learning from life experiences contrasted with the systematic learning of formal science and education the picture that emerges is that experiential learning is haphazard, unreliable, and misleading, and it must be corrected by academic knowledge.” Ken had already made some mental notes about creating a training program utilizing a training scenario that emulated the shop environment and added the necessary instruction and structure to experiential learning. He did this primarily because of the need for training to deliver consistent outcomes for the participants and ultimately, the composite shop.

A few other key ideas came from this session that in hindsight ensured the success of the composite team. The key ideas were:

- Bob, the lead composite trainer, needs a desk in the composite area and work with the composite team as they worked through process issues and strategies to build acceptable products.
- Perform a gap analysis. The gap analysis was chosen rather than a typical needs analysis because the focus was specifically on the future state and how to get to that future state within the shop.
- Send two of the trainers with transferable skills to a month-long composite course to give the team more depth in the composite area and to duplicate the training from the composite school locally. Creating more depth in the composites area was useful, but the duplication of the composite course from the nations “best” composites school was not the “best” of ideas.
- Define what success of the training program meant in terms of a metric that was meaningful to the composite shop as opposed to the L&D team. This was critical because the “my success is your success” mentality is what set the foundation for the strong partnership and trust that was needed in order to overcome the communication issues that were present within the organization. This was very similar to a level 4 evaluation (Kirkpatrick & Kirkpatrick, 2016).

Gap Analysis

For the current and future states Steve brought in the information for planning, Ben for engineering, Patsy for manufacturing, and Bob brought in perspective from the composite manufacturers working directly on the product. Once the current and future states were accurately defined with multiple perspectives, the gap between the current and future states was readily apparent. Table 1 shows the primary issues or gaps found from the gap analysis process.

Table 1. Gap analysis issue and proposed solution

Performance Issue and Key Findings	Solution
New materials behave differently in the lay-up process. Ben, the manufacturing engineer, stated that the materials for the project are different than previous materials used in the shop and that the different materials “behave” differently in the lay-up process. Different lay-up techniques are required for the material due to the nature of the material.	Hands-on experiential training, job aids, issues brought up in daily crew meetings. Composite technicians need experience working with the materials prior to entering the shop and working with the material.
New bagging process varies from the traditional process. Ben also concluded that a different bagging process which varies from the traditional process utilized is required due to the size and shape of the parts.	Hands-on experiential training. Composite technicians need to experience bagging parts prior to entering the shop and working with the material.
Lack of standardized processes for critical procedures. Manufacturing personnel on the team stated how several critical procedures were not standardized. One such practice was where to place the vent holes in the bagging. This is a critical step because the improper placement of the vent or weep holes can cause critical defects such as resin starved areas.	Develop standardized processes and hands-on experiential training completing the processes.
Lack of communication of success metrics. The team did not know what goals they needed to meet and they specifically did not know how what they were doing fulfilled the goals of the organization.	Clearly identify the metrics to measure success. Emphasize how the training will affect the metric values.
Lack of feedback. The people completing different stages of the build process did not get feedback if there were errors or defects caused by the work they accomplished. This lack of feedback facilitated inherent errors in the product.	Build in feedback loops within the shop and incorporate the feedback loops into the training course.
New employees with composite experiences are not consistent with what we needed.	Hands-on experiential training, job aids, issues brought up in daily crew meetings.
New Composite Technicians without previous experience are needed to fill the number of positions needed to meet the build requirements.	Hands-on experiential training, job aids, issues brought up in daily crew meetings.

Training

After training was found to be a major part of the solution to several of the issues the team began working towards designing and building the training course. Everyone had an idea of how the training should be approached. This was true of Bob, the lead composite trainer as well, except Bob had a different idea of how the training should be conducted.

First Training Development Meeting

As the team began to gather for the initial training meeting, everyone on the team was talking about how they could share resources and more importantly get resources for the training. These conversations were indicative of the high level of energy that was generally present on the team.

To kick off the meeting, Ken started by clearly defining and communicating the overall requirements of the training course. Two of the major points were the 3 distinctly different audiences and the need for anyone who has gone through the training to immediately be able to apply what they have learned in the shop. Table 2 shows an overview of the two conditions

Once the high-level requirements were stated, Ken introduced the Course Design Tool Kit in order to more formally document the different stages and iterations in the process. The “Tool Kit” was an internally created document based on the ADDIE model. The “Tool Kit” was used for all course design and it contained a sign-off for

Table 2. Conditions and needs

Condition	Need
<p>Three distinct audiences are going to attend the training.</p> <ul style="list-style-type: none"> • Current employees • New employees with composite experience • New employees with no composite experience 	<p>Training must be designed in a way for the participants to gain value from attendance. Experienced and non-experienced employees must be able to practice the specific skills needed for the manufacturing of the leading edges.</p> <p>The training course must be adaptable to challenge all skill levels.</p>
<p>Currently, new employees with no experience need to work under an experienced employee for 90 days prior to being considered skilled enough to complete tasks on their own.</p>	<p>After attending the training, new employees and new employees with no experience need to be able to apply what they learned in training to their job immediately and be able to work. The time required for a new employee with no prior experience to work independently needs to be brought down to 30 days.</p>

each stage of the model. The key stakeholders would sign if they were in agreement with the team about the training. This was a critical piece of information to share with the team because this realization helped to keep a certain level of focus on the current process and minimize scope creep.

After the initial introductions, the floor was open to discussion. This was informal because there were many ideas waiting to come out and Ken wanted to provide an environment that encouraged ideas. After the sharing of ideas, the conversation would then circle back to focus on the details of the course design. In a sense, the other members of the team were initially used as SME’s for the different processes they owned. When the floor was open for an overall discussion about the training each team member felt as though they had a good understanding of the underlying issues and how to fix them with the training because of the work they did on the gap analysis.

Bob was also highly engaged in the process because he “had done this before” and “knew” how the training should progress. There were a lot of opinions and perspectives being shared. These thoughts and perspectives were written on the dry erase boards. Each of the perspectives was at a high level or the proverbial 30,000-foot level rather than a granular level. This perspective served the meeting well because Ken and Annette were able to see trends and purposefully share those trends with the team. Table 3 Shows the trend and some of the comments.

Table 3. Emerging trends from initial comments

Trend	Comments
Hands-on training needs to start from the beginning of the class.	Patsy: “The technicians have to build products, so the training has to have them build.” Bob: “Multiple surfaces have to be used to give the technicians experience on different shapes.”
For non-experienced employees to be able to perform with minimal help when coming to the shop, the training needs to simulate the shop environment.	Patsy: “When people get to the shop, they need to be prepared and able to work on their own quickly.”
The training has to be tied to a production metric so we can visually see if the training was a success or if we need to make further adjustments.	Bob and Ben both make comments similar to “How are we going to make sure the training worked?”

Leading Edge Training for Leading Edges

As the initial meeting was coming to a close, it was clear that the training had to be a hands-on experiential learning process that simulated the shop environment. The simulation needed to include processes, materials, tooling, and tools used in the shop. Because of the conclusion that hands-on training was the best solution each team member was given the assignment to go back to their work area and complete a task analysis that was in the Course Design Tool Kit.

The task analysis was a breakdown and rating of the different individual tasks that were required to meet an enabling learning objective. The task analysis utilized a 1 - 10 rating system with the categories of Frequency, Criticality, and Importance. Once the ratings were input into the spreadsheet, a color rating system was used to identify the importance of the task for learning the objective. The ratings were set to automatically color according to the predetermined parameters. The color code system ranged from yellow, not important to blue, critically important.

The task analysis helped to define the specific tasks that were required to create a hands-on experiential learning environment. Most importantly, it helped to define where academic learning was needed in order for the training to not become inconsistent and haphazard. Kolb(2014) detailed the possibility of a lack of consistency and a sense of haphazardness of the training if there was no academic learning. The task analysis gave the structure that is needed for the students to have a consistent experience and for the training to achieve repeatable outcomes.

Initial Presentation to Stakeholders

A key element of the design and development process was that presentations and feedback sessions were built into various points in the process. The feedback sessions were points where other L&D team members, as well as anyone from the manufacturing, planning, or engineering areas, could sit in and listen to the “pitch” of the training and offer feedback. Leadership from the various departments were always included in the sessions. These feedback sessions proved to be valuable for two key reasons:

1. The sessions created buy-in by the leadership and personnel because the people in the other organization rightfully felt they were contributing to the training and more importantly to the future success of the organization. Their “stamp” was on the product.
2. Having continuous feedback ensured that the final product met the needs of the three similar but mutually exclusive groups that would be receiving the training.

Bob was given the lead role to present what the team discussed and decided up to this point. This proved to be a mistake that was worth making because what ensued made sure that the course was designed and delivered from the perspective of employee performance and define the best ways for learners to gain the necessary academic information required to make experiential learning consistent and effective (Kolb, 2014).

The morning of the first feedback session Bob came in early to gather materials. He had some binders and different composite materials and was ready to show everyone in the feedback session “how it was going to be done.”

People from all areas of the plant started to gather in the conference room within the training hangar. There were about fifteen total people including directors and a vice president. Bob started by handing out several of the binders and had the meeting participants open up the binders. Bob then grabbed a piece of string and some glue and said: “this is the first composite material.” “The first week of class we are going to fill this binder with the different types of composite materials and really identify what they are made of and how they behave.” None of this was part of the teams earlier conversations. The questions immediately came flying in from the crowd. The questions were “How long will they spend in a classroom before they get their hands dirty?” and the V.P. asked the most poignant question, “how is this supposed to help my people build parts?”

After the V.P. asked that question several of the directors jumped into the conversation offering help from their perspective are to build tooling and supply the materials needed to create a simulated shop environment. The planning department offered to loan 6 new mobile computer stations where they could hold the training process similar to the way the production processes will be held and accessed. Production operations offered to build modified tooling to simulate the shop tooling. What could have been an absolute disaster had turned into a great opportunity. The materials were being set in place to have the training environment simulate the shop environment.

Decisions on How Training Would Occur

After the initial feedback session, Ken kept the team together for a debrief after the feedback participants left. The overall feel was upbeat, but the frustration towards Bob was palpable. Key decisions were made at this point. The decisions were made to help the students and completely focus the training on task performance and the employee’s ability to perform on the job. These decisions were:

Leading Edge Training for Leading Edges

- The academic learning would be focused on the practical needs of the employees that were found from completing the task analysis. Nowhere in any task analysis did the history of composites reveal itself as important.
- A lecture was not to be used as a teaching tool. Other methods would have to be used to get information across. Demonstration-performance was the preferred method. A large lay-up table with an adjustable mirror above the table was purchased to better facilitate the demonstrations. This table enabled learners to gather around and see what the instructor was doing as the instructor explained a process or technique.
- Sitting in the classroom was limited to the very beginning and end of class so the students could gather or leave their belongings.
- Crew briefings were utilized at the beginning of the class. The briefings simulated the shop environment and prepared the students for the work they would accomplish that day.

Training Strategies

Not allowing the lecture to be utilized as a teaching tool caused Bob and the team to pause and think of better ways for the technicians to learn. Annette continually asked the question “how would you learn this the best?” The answers to those questions came in three basic forms.

- **Demonstration Performance:** This was done by using the lay-up table with the mirror. The instructor would walk the technicians through parts of the process and then they would practice on their equipment.
- **Experiential learning and utilize mistakes as learning experiences.** In the training environment, not everything would be 100% correct. Students will make mistakes and not follow the processes. When this happens the lay-up, bagging or part will have a defect. These defects were used purposefully. Defects were used for troubleshooting. Is this repairable? If it can be repaired, how? What is the probable cause of the defect? This was a popular process because it gave contextual experience within the training experience. When mistakes were made and the defects were seen and used for troubleshooting and not admonishing the individual, the lessons seemed to last.
- **Allow the learners to perform some of the demonstrations as the instructor walked them through the process.**

The above strategies facilitated the design and development of the experiential learning process. Following these basic strategies enabled the design to meet both the academic and experiential needs for the learners to succeed when they returned to the composite shop.

Training Product

The final training product was academically sound and experientially rich. The team had delivered an experiential learning course that successfully navigated the issues outlined by Kolb (2014) and delivered a rich experience that was two weeks in duration and simulated the shop environment. Within the first moment the technicians arrived at the class they started handling tools and preparing to lay up parts. The technicians would lay-up 4 specific parts in the 2 weeks time. The parts began with a simple flat plate and culminated into laying up a simulated leading edge as if they were in the shop working.

Because of the cross-functional team and the feedback sessions the training team was able to have moc up tooling made specifically for the training that closely simulated the parts being built in the shop. The training also included portable computer systems that were implemented in the shop due to the analysis process. The training team also created and used the job aids that were used in the shop.

One notable aspect of the class is how successful it was to utilize mistakes the learners made for opportunities to troubleshoot and discuss ways to avoid these types of issues. For future classes, the trainers built parts with defects on purpose, in order to lead the conversations and give opportunities for the learners to troubleshoot and repair defective products. The feedback received from the learners on this particular aspect of the course was overwhelmingly positive.

Results

After successfully completing the experiential learning process new composite technicians with previous composite manufacturing experience were able to work independently in the shop after a 3-day orientation. This is a reduction of approximately 3 weeks. New employees with no experience building composite parts were able to work independently, depending upon the task, within 1 - 3 weeks. The normal time prior to this training course was 8 - 16 weeks.

Leading Edge Training for Leading Edges

Initially, the current composite manufacturing employees attended the training. After the initial training for the current employees, the defect rates immediately fell below the maximum defect rates allowed of 2% for repairable defects and 0.5% for non-repairable defect rates. As new hires entered the shop, the defect rates were consistently held within the requirements.

CONCLUSION

The success of the training and ability of the shop to meet the production rate and maintain quality standards was due to the ability of the cross-functional team to work together and create changes in their respective work areas and then incorporate those changes directly into the training. This level of synergy is what made the experiential learning process successful for the composite manufacturing technicians. What they learned in training is how they performed in the shop. The learning was reinforced in the shop and a culture of excellence in manufacturing was created.

Within this case were multiple performance issues that were manifesting in a big way on the production of leading edges for a new aerospace vehicle. The training solution was the primary focus of this writing even though multiple solutions were mentioned. There is rarely one solution for all of the issues. This is one reason why the use of a cross-functional team can be effective. The use of a cross-functional team helps to get buy-in and support from all stakeholders.

Within the case, several issues within the teams were detailed as well. The purpose of the case was to illustrate the effectiveness of cross-functional teams and to highlight the importance of the people and their perspectives within the process.

The training solution was an integral part of the overall success of the composite manufacturing shop. The use of a cross-functional team proved to be highly advantageous for the organization and the individual departments within the organization. The cross-functional team was able to move quickly and come up with integrated solutions that worked to enhance the performance of the individual, which in turn enhanced the performance of the organization.

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KEY TERMS AND DEFINITIONS

Bagging: The process that a composite part goes through prior to entering the oven or autoclave. Bagging is used to get a good vacuum seal and facilitate the parts conforming to the tooling.

Lay-Up: Placing of composite material onto a tool in a specific order and orientation.

Manufacturing Process Standards (MPS): Specific standards and directions on how to build the parts.

Tooling: Metal materials machined to a specific shape and specification. The composite material is then applied over the tool to form the part.

APPENDIX: QUESTIONS FOR DISCUSSION

1. The team had a high level of cohesiveness because they previously worked together and each team member knew the other team members. What role do you see team cohesiveness playing in the success of the design and development of the experiential training course?
2. The organizational culture of Aerosector often created impediments to communication between teams. Utilizing the cross0-functional team created a requirement for multiple organizations to clearly communicate with each other. Why was this important to the design and development of the experiential learning course?
3. When Bob was tasked to give the initial feedback presentation to the stakeholders, the team assumed he would present what they discussed. Bob made many decisions about how the training would happen without consulting the team and he presented what he thought was the “right” way. Luckily this worked to the advantage of the team. What could have been done to ensure Bob presented what the team created without adding his own material into the presentation?
4. After the initial feedback session, the design team made several decisions. One of which was to not use lecture as a learning strategy. How can making “radical” decisions help your design team become more creative?

Chapter 15

Creating Unlimited Business Opportunities for an Insurance Sales Force Through Design Thinking

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EXECUTIVE SUMMARY

New insurance agents approach their pool of close friends and family members because these people have a high level of trust in them and therefore their rate of closing should be higher. As the size of their client pools is a critical survival factor and trust cannot be built rapidly, one major reason that agents quit their jobs is that they deplete their pools. For resolving that industrial deadlock, the company developed a social sales model through design thinking to help insurance agents build trust among their prospective customers. After implementing a pilot project in Hong Kong in 2018, the agents enhanced their abilities of social influencing, lead generation, and deal closing. Following the successful pilot project, the company continues to transform its business and leverage its social sales advantage in Asia.

DOI: 10.4018/978-1-7998-0054-5.ch015

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ORGANIZATION BACKGROUND

The insurance company (the company) is a leading enterprise in international financial services that provides a diverse range of insurance, wealth, asset management, and mandatory provident fund solutions for both individuals and corporate customers. Established in Canada in 1892, the company operates today in a number of markets worldwide. In 2018 it was named as one of the Global 100 Most Sustainable Corporations in the World. The company's Hong Kong branch was founded over 125 years ago.

Since 2017, the company headquarters has announced a series of appointments to newly created senior positions in the area of digital transformation with the aim of building the company's momentum in the use of digital data and analytics to develop innovative ways to fulfilled customer all-rounded demands through improved business model and workforce competence. From the strategic perspective of digital transformation, the company decided to enhance its competitive advantage through customer value creation, and continues to transform itself by advancing its digital strategy and finding innovative ways to listen to customers, understand their satisfied and unmet needs, discover their hidden & potential demands and improve the customer experience at every touchpoint.

From the perspective of executing the digital transformation, the company is committed to strengthening the digital mindsets, skillsets, and toolsets of its workforce. The scope encompasses all stakeholders staff from the back-office operations staff to the frontline salesforce (e.g. insurance agents, wealth management consultants, and financial planning professionals), both locally and globally, at the individual, team, departmental, and organizational levels.

SETTING THE STAGE

Over the past two years, the majority of the company's digital transformation projects have focused on operations of back offices and after-sales services. More recently, the company has begun to extend the spectrum of digital transformation from operations to sales and from back end to front end. The company's vision is to create extraordinary and sustainable business results through an all-encompassing approach to transformation.

CURRENT CHALLENGES FACING THE ORGANIZATION

In reality, the sales model of the insurance industry has remained quite traditional and dependent on face-to-face selling by front-line insurance agents. Under that traditional sales model, there are two critical industrial deadlocks for sales individuals and corporate levels.

In general, in the early stage of their career, new insurance agents would approach their close friends and family members because these people have a high level of trust in them and therefore their rate of closing deals should be higher. However, the number of friends and family members is very limited and difficult to increase within a short period.

Often, the majority of insurance agents will have used up their pool of close friends and family members within 6 to 12 months. Afterward, they face a very tough situation brought about by the lack of another pool of prospective high-trust customers. As the size of the prospective customer pool is a critical survival factor for insurance agents, some proactive agents build their pool through different traditional methods. For example, they may use wealth and health questionnaires to survey strangers, extend their personal networks by participating in different events, and request referrals from their high-trust customers. However, trust is a critical factor in insurance selling and cannot be built rapidly. Therefore, a major reason that insurance agents quit their jobs or leave the industry is that they deplete their pool of prospective high-trust customers.

The limited source of prospective high-trust customers creates a serious business challenge at both the frontline salesforce and corporate level. A high turnover of insurance agents lowers the working morale of the company as a whole. In addition, after insurance agents leave the company, their customers may not be comfortable with the new agents, resulting in some customers terminating their insurance services.

Moreover, the limited source of prospective high-trust customers renders many people unwilling to join the insurance company as an agent, complicating the insurance company's efforts to scale up their agent force. For the global insurance industry, the limited source of prospective high-trust customers is one of the great challenges to sustainable business growth.

BUILDING FIRST-EVER SOCIAL SALES MODEL

For resolving those deadlocks of the company and insurance industry, the top management initiated social sales model and positioned the model as one of the major building blocks of the digital transformation. The company's Chief Digital Technology Officer, a supporter of the Design Thinking method (d.School, Stanford, 2009), has decided to develop an innovative social sales model for digital transformation and insurance industry. Accordingly, she has outlined 10 major aspects between the traditional face-to-face sales model (offline approaches) and social media sales model (online approaches), as shown in Table 1.

Table 1. Major comparisons between the traditional face-to-face sales model and social media sales model

	Traditional Sales Model	Social Sales Model
Aspect 1: Market size of potential prospective customers	Limited	Unlimited
Aspect 2: Medium for delivering messages	Face-to-face meetings Phone calls (Oral)	Online social platforms Messaging (Texts or pictures)
Aspect 3: Leverage for each activity	One message to single individuals in traditional sales calls (One-to-one approach)	One message to limitless connections on social media platforms (One-to-many approach)
Aspect 4: Geographic constraints	Yes	No
Aspect 5: Degree of convenience (or flexibility) for conducting sales activities or promotions	Low/Difficult	High/Easy
Aspect 6: Degree of convenience for increasing the frequency of sales activities or promotions	Low/Difficult	High/Easy
Aspect 7: Degree of convenience for promoting sales force credibility to prospective customers through track records or positive third-party comment	Low/Difficult	High/Easy
Aspect 8: Degree of convenience for management by monitoring the quality of sales activities	Low/Difficult	High/Easy
Aspect 9: Degree of convenience for management by monitoring the effectiveness of sales processes	Low/Difficult	High/Easy
Aspect 10: Average cost per prospective customer of trust building or sales promotion activities	High	Low

Creating Unlimited Business Opportunities for an Insurance Sales Force

To achieve the transformation to the social sales model in the above 10 major aspects, the Chief Digital Technology Officer appointed the Head of Digital Distribution for Asia (Digital Head) to develop strategic goals, business strategies, implementation blueprints, and monitoring systems through Design Thinking tools. For enhancing the return on investment of the digital transformation project, she also set the following criteria for the project:

Criteria 1: The project should focus on measurable outcomes

Criteria 2: All approaches should take a system (or scalable) view

Criteria 3: All aspects of the project should add value to the performance of the workforce

Criteria 4: All staff performance improvement activities (e.g. training workshops) should address the root causes of inadequate workforce performance

Criteria 5: All innovative ideas should be generated based on the results of customer needs assessments

Criteria 6: All innovative ideas should be executable or implementable

Criteria 7: All project outcomes should be evaluated

LEVERAGING THE POWER OF DESIGN THINKING METHOD

The Design Thinking method can be classified as effective human performance technology and its major guiding principle is human-centered (Stanley, David & Gabriel, 2019). The method uses a wide range of interventions drawn from various disciplines including behavioral psychology, instructional systems design, sales, and marketing enhancement, organizational development, and human resources management. Design Thinking method stresses the rigorous analysis of present and desired performance levels, identifies the root causes of human performance gaps, offers a wide range of interventions to improve human performance, guides the change management at the individual, team, departmental and organizational level, and evaluates the results (Jeanne, 2019).

Over the past ten years, Design Thinking has become a globally recognized method for developing innovative solutions with a detailed action blueprint for different types of transformation (e.g. business, sales, service, and operation/product transformation). In fact, Design thinking isn't a fad, but rather a way for all problem solvers to put the user at the center of a problem to develop solutions from the outside in rather than the inside out.

The Design Management Institute's 2015 Design Value Index (DVI), based on a portfolio of 16 publicly traded stocks from companies considered to be "design-centric" contingent on a set of criteria that reflects best practices in design management, shows a 211% return over the S&P 500 (Jeneanne, 2016). The method comprises five major stages whose themes are Empathize, Define, Ideate, Prototype, and Test (d.School, Stanford, 2009).

- **Stage 1 – Empathize:** Empathy is the centerpiece of a human-centered design process. The "empathize" mode is the work you do to understand people within the context of your design challenge. It is your effort to understand the way they do things and why, their physical and emotional needs, how they think about the world, and what is meaningful to them.
- **Stage 2 – Define:** The "define" mode of the design process is about bringing clarity and focus to the design space. It is your chance and responsibility as a design thinker to define the challenge you are taking on based on what you have learned about your user and the context. After gaining expertise on the subject and invaluable empathy for the person you are designing for, this stage is about making sense of the broad range of information you have gathered.
- **Stage 3 – Ideate:** "Ideate" is the mode of the design process in which you concentrate on generating ideas. Mentally it represents a process of "going wide" in terms of concepts and outcomes. Ideation provides both the fuel and the source material for building prototypes and getting innovative solutions into the hands of your users.
- **Stage 4 – Prototype:** The "prototype" mode involves the iterative generation of artifacts intended to answer questions that get you closer to your final solution. A prototype can be anything a user can interact with – be it a wall of post-it notes, a gadget you put together, a role-playing activity, or even a storyboard. Ideally, you aim toward something a user can experience.
- **Step 5 – Test:** The "test" mode involves seeking feedback from your users about the prototypes you have created, providing you with another chance to gain empathy for those you are designing for. Testing is a further opportunity to understand your user, but unlike your initial empathy mode, you have now done more framing of the problem and created prototypes to test.

DEVELOPING SOCIAL SALES PROJECT MANAGEMENT TEAM

Under the top management's strategic initiative, the project management team led by the Digital Head used these five stages of Design Thinking as the framework for its pilot program for the transformation project of social sales model. As the social sales model concept is quite new to the insurance industry, the company selected Asia's most innovative city—Hong Kong—to conduct its pilot program.

As TNS statistics show that Facebook is one of the most recognized social media brands in Hong Kong (Hana, 2018), the Digital Head chose it as the major channel for the pilot program to build its social sales model. The theme of the pilot program was “Creating an unlimited pool of prospective high-trust customers through Facebook.”

Obviously, the overall business strategies for “Creating an unlimited pool of prospective high-trust customers” related not only to digital technology but also to effective analytical approaches for assessing both the trust level of prospective customers and the effectiveness of the social selling processes to enhance trust on social media.

The Digital Head, therefore, invited an expert in Design Thinking method and sales force performance enhancement management, Mr. David Chung, along with a renowned expert in social selling, Mr. Inno Man, as advisors to the project management team for the pilot program. To enhance the success of the pilot program, the company arranged for 25 young, well-educated, and enthusiastic new insurance agents from the members of SEED Program of its Hong Kong Branch to join the pilot program. The SEED program comprises a series of interventions, covering district development, recruitment supports, and sales support to help to engage the selected Agency Directors and their selected high-performance & high-potential new insurance agents.

FIRST-EVER SOCIAL SALES JOURNEY IN HONG KONG

Stage 1 of the Pilot Program: Empathize

Stage 1 aims to identify the current social sales practices of both the company and its insurance agents. For helping to unleash the potential of selected insurance agents, the project management team also develop a task force for assessing their social sales performance. The task force was led by two seasoned sales performance coaches, Mr. Hermus Leung, and Mr. Kevin Li. They conducted several discussion sessions

with representatives of the pilot team and their management, analyzed some of their posts on social media, and conducted a detailed online survey of the entire pilot team.

From this survey, the project management team concluded that the selected agents of the pilot team were not active players on social media and that the social sales model was very new for them. Below is the finding summary of the survey:

- Nearly all of them were unwilling to proactively add new friends from the Facebook community
- The majority of them issued posts only every three days or less often
- Over a quarter of them issued posts monthly or less often
- Over half of them did not try to develop new business through the Facebook community
- Over half of them had heard of successful cases of digital sales models of other insurance companies but did not know the best practice of these cases
- Around half of them only gained “around 6 to 20 likes” per posting on their Facebook page
- Around 60% of them were not using Facebook’s messaging functions

Stage 2 of the Pilot Program: Define

The aim of stage 2 is to define how to effectively resolve bottlenecks. Specifically, the project management team should define how insurance agents can use social sales model to build trust among their targeted prospective customers. This involves two major steps:

Step 1: Analyzing the Customer Trust Level Accurately

After further study and conducted market researches on the targeted customer segments of the Hong Kong branch, the project management team chose the customized 5i Model of customer connection (Gabriel & David, 2018) to help the insurance agents analyze the trust level and potential purchase power of prospective customers on Facebook. Based on several business researchers, fully connected customers are 52% more valuable, on average, than those who are just highly satisfied and social media can have a big impact on a connection. (Scott M., Alan Z., & Daniel L., 2015).

The 5i Model for customer connection (see Figure 1) illustrates the all-rounded human demands of the customers when they interact with a product or service. It includes three categories:

Category 1: Not connected: The products or services did not meet customer expectations

Category 2: Partial connected: The products or services met customer expectations,

Category 3: Highly or Fully connected: The products or services exceeded customer expectations.

Category 1: Not Connected

Level 1 meets customer expectations with current customer service passively. It is reactive to customer inquiries and meets them satisfactorily. Most organizations operate at or below this level of customer service. In our context, this means customers feel negative functional satisfaction and may leave or never come back to repurchase if they are in this category. It negatively impacts business performance and threatens the organization's survival.

Category 2: Partial Connected

This category represents proactive steps taken from a variety of feedbacks to anticipate and resolve customers' issues. It is about "standing in the customer's shoes". Level 2 represents basic products or services delivered, while level 3 represents services that exemplify ease of use. When the brand differentiation reflects this category, the customer will continue to your products or services, but it is only one of a number of potential choices for future stays.

Category 3: Highly or Fully Connected

The third category represents having a regular exchange of information through conversations and interactions, but being "in the head" of the customers is critical in recognizing their needs before the customers do. Level 4 is about anticipating customers' unrecognized needs with a sense of meaning, while level 5 is about internalization.

Based on the algorithm of the patented system used to forecast sales opportunities and account potential (Patent No. HK1100626), the customer trust level consists of customers' personal perceptions and related feelings caused by both the one-off and cumulative effects of all of their online interactions, such as the content of posts, the exchange of personal points of view through comments, and the exchange of in-depth personal values through messaging on social media. To help the insurance agents classify the trust level of their prospective customers, the project management team divided the trust into five levels.

Level 1 (the Lowest Trust Level Located at the Bottom of the Pyramid): These customers feel bad about their interactions with insurance agents because they are angry or disagree with the agents' posted content, comments, or conversations on social media.

Level 2: These customers feel comfortable about their interactions with insurance agents because they are happy or agree with the agents' posted content, comments, or conversations on social media.

Level 3: These customers feel good about their interactions with insurance agents because they have acquired new ideas from the agents' posted content, comments, or conversations on social media.

Level 4: These customers feel great about their interactions with insurance agents because they feel inspired and have gained new insights that fulfilled their personal demands from the agents' posted content, comments, or conversations on social media.

Level 5 (The Highest Trust Level Located at the Top of the Pyramid): These customers feel wowed by their interactions with insurance agents and were inspired to actualize important things in their life through the agents' posted content, comments, or conversations on social media.

Step 2: Enhancing That Trust Level Appropriately

To help insurance agents develop posts, comments, and conversations on social media to enhance their prospective customer trust level, the project management team developed a 5-tier sales funnel model (see Figure 2) to master the social selling process of social sales model.

Tier 5 (At the Top of the Funnel): Prospective customers with no trust level are placed in this tier, such as when the insurance agent adds a new Facebook friend.

Tier 4: Prospective customers feeling “comfortable” (Level 2 of the 5i model) or “good” (Level 3 of the 5i model) can be classified in this tier.

Tier 3: The top 150 prospective customers who always interact with insurance agents on social media can be classified into this tier. The size of tier 3 is based on the rule of Dunbar's number (Brad McCarty, 2015) and it is a suggested cognitive limit to the number of people with whom one can maintain stable social relationships—relationships in which an individual knows who each person is and how each person relates to every other person. This number was first proposed in the 1990s by British anthropologist Robin Dunbar, who found a correlation between primate brain size and average social group size.

Creating Unlimited Business Opportunities for an Insurance Sales Force

By using the average human brain size and extrapolating from the results of primates, he proposed that humans can comfortably maintain only 150 stable relationships.

Tier 2: Prospective customers who engage in an in-depth exchange of views with insurance agents on social media can be classified in this tier.

Tier 1 (The Lowest Part of the Funnel): Prospective customers who engage in an in-depth exchange of personal values with insurance agents on social media can be classified in this tier. In fact, these are the ones most willing to meet insurance agents or even proactively asking to purchase insurance services.

In addition to defining the five tiers of trust for prospective customers on social media, the project management team developed a series of criteria and a quantified marking plan for each level, both of which can be implemented in online social listening and monitoring tools. To help insurance agents shift the customer from tier 5 to tier 1 of the sales funnel, the project management team developed a comprehensive guidebook for the social selling process and divided into the following six parts.

Part 1: Principles and processes for generating prospective high-trust customers

Part 2: Ways to increase the size of a fan pool from zero to 2000 in an effective and professional manner

Part 3: Critical do's and don'ts for developing eye-catching and iconic posts

Part 4: Approaches for developing impactful posts that touch customers on an emotional level

Part 5: Building mutual trust effectively through personal chats and messages

Part 6: Encouraging prospective customers to meet an insurance agent

Stage 3 of the Pilot Program: Ideate

The aim of Stage 3 is to help selected insurance agents conceive of different innovative social sales strategies with detailed action plans to break through bottlenecks and realize transformation. The project management team conducted two half-day training workshops to enhance the social selling skills of selected insurance agents in August and October of 2018. The social selling skills training workshop comprised two sessions with the following learning themes, duration, objectives and points.

The detailed information on session 1

Learning theme

- Becoming a social influencer

Learning duration

- 240 minutes

Learning objectives

- To understand the principles and process for generating high-trust prospective customers
- To know the effective ways to increase the fan pool (of an insurance agent's Facebook) from zero to 2000 in a professional manner
- To recognize critical do's and don'ts for developing eye-catching and iconic posts

Learning points

- Personal profile management
- Strategies and skills for developing social networks
- Basic content development skills for Facebook
- Influencing, commenting, and replying skills for Facebook

The detailed information on session 2

Learning theme

- Becoming a trusted friend of your prospective customers

Learning duration

- 240 minutes

Learning objectives

- To master the development of impactful and emotionally touching posts
- To build mutual trust effectively through intimate chatting/messaging approaches
- To make prospective customers eager to meet and share with you
- To make appointments with prospective customers and close deals

Learning points

- Advanced content development skills
- Customer emotion-engaging skills for online and offline
- Strategies and skills for inviting a face-to-face meeting
- Fan portfolio management and suitable development method

Stage 4 of the Pilot Program: Prototype

The aim of Stage 4 is to help selected insurance agents to simulate innovative social sales strategies and action plans. During the workshop, the participants learned to use a series of digital tools to re-segment their prospective customers on social media, and also to develop different sets of effective posts for different customer segments.

In addition, there were four simulation exercises on post-development, comment design, effective messaging, and powerful meeting invitations. The participants received comprehensive feedback on the strengths, weaknesses, and blind spots in their performance during these simulation exercises from the training team comprising Inno Man, David Chung, Hermus Leung, and Kevin Li. Some participants acted as targeted customers during the simulation exercise and provided very valuable comments from the customer's point of view.

To motivate the pilot team to practice more social selling, the company held an internal competition and sponsored some valuable prizes for the winners. This helped to create sales momentum and contributed to the team's digital transformation. In addition to the formal training workshop, the pilot team formed a mutual support group to share creative ideas, cases of successful post development, comments, and conversations.

Stage 5 of the Pilot Program: Test

The aim of stage 5 is to help selected insurance agents test their innovative social sales strategies and action plans in the real world. In other words, the pilot team should execute the social sales model for their real prospective customers on their own real Facebook accounts. To provide in-depth assistance to all insurance agents, the project management team divided the testing stage into two periods, each period lasting about 1 month. The first period is October of 2018 and the second period in November of 2018.

To monitor progress and provide timely support, the project management team conducted two follow-up online surveys during each period. In addition, they also provided useful tips weekly during the testing period to help resolve the pilot team's real-world challenges. During the testing period, the project management team also invited the pilot team's most outstanding performers (e.g. in closing sales deals) to share their stories of success with the others.

The pilot team gained good business results during the testing period of the pilot program. By following the social sales model, over a dozen appointments were made and several sales deals were closed, whereas no such deal with prospective customers (from social media) had been closed before the pilot program. The results of the pilot team represented a breakthrough in the digital transformation of the company's Hong Kong branch. Below are three areas of a business breakthrough for their social sales transformation project.

Area 1: The improved measurable result of social influencing power

The conversion rate from posting to sharing by others increased from 8.3% to 15.8% from the first to the second period, an increase of 90% in the testing stage. When further analysis of the pilot team's posts found them too self-centered and lacking the latest eye-catching wordings in the social media world, the project team helped them identify a target segment to match their personal style and suggested appropriate online portals to search for catchwords for different target segments.

Area 2: The improved measurable result of lead generation

The conversion rate from posting to generating appointments increased from 4.9% to 5.9% from the first to the second testing period, a 28% increase. An analysis of the pilot team's posts found the majority too rational and factual, the project team developed a dozen content templates using more human-centered storytelling approaches to help them optimize their posts.

Area 3: The improved measurable result of a deal closing

The conversion rate of posting to closing sales deals increased from 0.64% to 1.65% from the first to the second period, an increase of 124% in the testing stage. As the further analysis of pilot team posts found that the majority were too eager or too early in requesting a face-to-face meeting, the project team developed a list of statements to evaluate the trust level and disallowed to send meeting request before receiving a sufficient signal (e.g. the number of positive wordings) from a prospective customer. Based on the significant improvement from the first to the second period, the management of Hong Kong branch and the project management team expect the business results of the social sales model to be even better and the digital transformation momentum even greater if the project team fully execute their suggestions.

CONCLUSION

The management team believes that the pilot program successfully developed the mindsets, skillsets, and best practice for toolsets of the selected 25 insurance agents, reinforcing the company's implementation of its social sales model with innovative analytical and monitoring tools. The deliverables of the pilot program of the digital transformation project are shown below.

- Built localized social sales model, management process, skills and tools for enhancing the abilities of social influencing, lead generation and deal closing of insurance agents. The summarized business results of the pilot period are as below:
 - The conversion rate from posting to sharing by others increased from 8.3% to 15.8% from the first to the second period, an increase of 90% in the testing stage
 - The conversion rate from posting to generating appointments increased from 4.9% to 5.9% from the first to the second testing period, a 28% increase.
 - The conversion rate of posting to closing sales deals increased from 0.64% to 1.65% from the first to the second period, an increase of 124% in the testing stage
- Identified the major touchpoints and critical moments on social media for most effective trust-building between the insurance sales force and prospective customers on social media platforms
- Designed a trust-based social selling procedure with detailed scripts from the generation of leads on social media platforms to face-to-face closing techniques in the first meeting

To accelerate the penetration of social sales model applications for the insurance salesforce, the pilot team shared its experience of the pilot program across all agencies of the Hong Kong branch.

To accelerate the digital transformation of the Hong Kong branch, the management team appointed over 50 staff of Agency Director, Sales Team Leaders, Sales Managers to master the best practice of social sales model. Following the successful pilot program of the social sales model in Hong Kong, the company continues to differentiate itself in the Asian market by seeking more innovative ways to transform its business and leverage its social power.

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KEY TERMS AND DEFINITIONS

5i Model: The 5i Model for customer connections illustrates the all-rounded human demands of the customers when they interact with a product or service.

Customer Connection: It is a bundle of subjective feelings that come together to create a bond between customers and companies. The feelings may be anger, sorrow, joy, love, or any of thousands of emotions that humans experience.

Design Thinking Method: It is an innovative problem-solving method and it can be classified as effective human performance technology. The method was developed by d.school of Stanford University. The guiding principle of the method is not only problem-focused, but it's also human-centered.

Digital Transformations: It is the profound transformation of business, operational models, organizational processes, and employee competencies to fully leverage the changes and opportunities of a mix of digital strategies and technologies.

Dunbar's Number: It is a suggested cognitive limit to the number of people with whom one can maintain stable social relationships.

Social Sales Model: Insurance agents approach prospective online customers through social media posts, comments, and messages.

Traditional Sales Model: Insurance agents approach prospective offline customers through face-to-face activities.

APPENDIX: QUESTIONS FOR DISCUSSION

1. Do you think the traditional sales model will be replaced by social sales model in the insurance industry?
2. What is a critical motivation and obstacle of insurance agents to adopt social sales model in their daily works?
3. How did the design thinking approaches helped to increase the effectiveness of pilot programs and sales transformations?
4. For enhancing the success rate of pilot programs, what are the ideal personal characteristics and working experience of the pilot team members?
5. Other than the suggestions of the project team, what is your advice for enhancing the conversion rate of “posting to closing sales deals”?

Chapter 16

“But I Know How to Google”: Motivating Volunteers in an Information Literacy Module

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EXECUTIVE SUMMARY

An up-front analysis is crucial to ensuring a need is learning-related and the resulting intervention actually meets that need for learners. The current case study explores how two instructional designers adopted a systems approach for their performance analysis, with a major focus on learner analysis as a means to understand the underpinnings of the social system within the client organization, which more clearly revealed potential motivations of the learners. As a result, the two designers delivered an eLearning module that 1) combats an actual gap in knowledge and skill, 2) is relevant to the intended audience, and 3) is compatible with the organizational culture and infrastructure.

DOI: 10.4018/978-1-7998-0054-5.ch016

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ORGANIZATION BACKGROUND

It is estimated that one in every thirty children in the United States does not have secure access to permanent housing each year (Bassuk, DeCandia, Beach, & Berman, 2014). According to a 2017 report from the United Nations International Children’s Emergency Fund (UNICEF), the United States ranks seventh in economically developed nations’ child poverty rates. Among domestic estimates, California consistently ranks among the worst performing states across child homelessness, wellness, and poverty measurements (Bassuk et al., 2014). Children who are exposed to extreme levels of poverty during fundamental development stages are at greater risk for physical, functional, and mental health issues as well as lowered expected outcomes as adults (Gupta, de Wit, & McKeown, 2007).

To combat the serious challenges these youth face, government, and nonprofit agencies have worked closely to provide academic support, temporary shelters, and mental health and counseling resources, among other services. Since the early 1990s, California Coalition for Youth (CCY) has served the central California region with a mission of “provid[ing] strong statewide policy leadership around issues concerning disconnected runaway and homeless youth” (CCY, 2019). To address this mission statement and reach CCY’s targeted population of 12–24-year-olds, the organization began operating the California Youth Crisis Line (CYCL) as a 24-hours-a-day, seven-days-a-week emergency response and crisis intervention resource. According to CYCL, the crisis line has helped more than a million youth in crisis over the last twenty-three years it has been in operation, receiving more than twenty thousand calls annually. Callers have been connected with professionally-trained counselors and affordable resources to assist with suicide, depression, trauma, and human trafficking as well as other, more typical teenage issues. Currently, CYCL is the only statewide, toll-free crisis line in California.

As an organization, CCY is split into several departments to best serve its mission, including administrative staff, membership and outreach coordination, an advocacy board, and the crisis line. A nineteen-person volunteer board that includes youth representatives serves in an advisory role to the organization. The executive director reports to the board and oversees the fulfillment of the CCY mission as well as the day-to-day operations. In addition to the executive director, CCY employs seven full-time staff, three of whom work directly with CYCL. Because of limited resources, volunteers are primarily responsible for responding to callers, which

“But I Know How to Google”

requires extensive training from the organization and a substantial time commitment from the volunteers. To strengthen the mission-driven culture of the organization and ensure buy-in from the sixty plus crisis line volunteers, CYCL employees dedicate significant energy to providing comprehensive, intentional, and effective training opportunities

SETTING THE STAGE

Volunteers staffing the CYCL play an important role in the organization. They receive extensive training in crisis interventions as well as counseling techniques and dealing with critical issues. The CYCL Program Manager, Program Coordinator, and Lead Counselor are the full-time staff who provide direct oversight and supervision to the crisis line volunteers. In coordination with the Training and Development Specialist, the staff is responsible for orientation and continuing education to prepare volunteers for their high-intensity responsibilities. With experiences in counseling, social work, and non-profits, the employees are content experts and approach training with professional techniques like motivational interviewing and observational training through shadow experiences. There are no instructional design specialists on staff to consult on additional training approaches.

The most frequently utilized technology by CYCL volunteers is software designed specifically for non-profits running a crisis line called iCarol. This software is a web-based application that allows for shift scheduling, statistics tracking, data analysis, resource sharing, and case management. However, iCarol was not designed to deliver and organize training, and CYCL was looking for a technology-based learning solution without having to retrofit software that was not designed for the purposes of training.

CASE DESCRIPTION

Instructional Problem

CYCL draws its volunteers from Sacramento, California, colleges and universities with strong psychology, counseling, and social work programs. According to a 2013 study of U.S. undergraduates, students find research to be more difficult than ever before, specifically when getting started searching and filtering through massive amounts of information (Head, 2013). This challenging concept is called information literacy, defined as the reflective discovery of an information need, recognition of how to identify appropriate resources to meet this need, and process of evaluating credibility and authority of information once a resource is found.

Consistent with national trends, CYCL employees working with volunteers noted a deficiency in information literacy competencies resulting from a lack of knowledge and skills in searching and resource awareness; the clients identified that volunteers struggle with understanding how to connect resources to youths’ issues, find Internet sources, and evaluate information once discovered. Because resource brokering, or the identification, selection, and arrangement of resources dependent on the specific callers’ needs, is an essential responsibility of CYCL volunteers, information literacy training is highly important. Therefore, the two instructional designers partnered with the CYCL Program Manager and Training and Development Specialist to develop an eLearning module as the intervention providing resource brokering training to the volunteers in order to better assist callers.

The Designers

In recognition of this training gap for its volunteers, CYCL contacted the authors in fall 2018 to consult on an intervention. At the time, both authors were enrolled in a computer-based multimedia design course as part of their Ph.D. coursework in the Instructional Design and Technology program at Old Dominion University and agreed to develop and design the training as part of a required design project. Additionally, the first author has a graduate degree in library and information science, while the second has both graduate and professional certificates in instructional systems design, bringing relevant expertise to CYCL. To ensure the resulting module would be appropriate for the CYCL environment and culture, the designers considered various systemic components and designed with those components in mind. The following section summarizes those considerations.

Learner Considerations

General Characteristics

From a systemic perspective, the instructional designers had a lot to consider in terms of how the learners enter into the CYCL system, contribute to it, and then eventually move beyond that system. There were to be approximately sixty learners participating in this training, a majority of whom were recruited from undergraduate psychology, counseling, and social work programs within the region. With a majority of the learners between the ages of 18 and 23, approximately 41 percent were white females. Of the remaining volunteers, roughly 20 percent were Latina females, 10 percent white males, 7 percent Asian females, 6 percent black females, 4 percent Middle Eastern females, 3 percent Latino males, 3 percent black males, and 3 percent Asian males. Most had made progress toward an undergraduate degree in their respective programs but had not yet completed any terminal degrees beyond a high school diploma. Therefore, the learners’ academic progress correlated to experience with and proficiency in academic research. Volunteers typically were enrolled in school full time and were otherwise not considered professionals.

Specific Characteristics

In order to be successful in this module, participants would need access to an Internet-enabled computer and a basic understanding of Web navigation and word processing. As prerequisites, they must complete all of CYCL’s volunteer requirements: provide a copy of a valid photo ID, complete and pass a criminal background check, commit to a minimum of four volunteer hours a week for at least one year of service, and finish the existing twenty-eight hours of face-to-face training on topics such as motivational interviewing, counseling communication, rapport building, and cultural competency in addition to twelve hours of “buddy training” where they shadow more experienced volunteers before receiving solo calls. Learners then completed the proposed module after both the face-to-face instruction and their buddy training hours so they could receive priming from the veteran volunteers who use these skills in practice.

There are no physical requirements for this training, but it was designed in such a way that reasonable accommodations could be made for those with physical and non-physical disabilities. The designers ensured the module was SCORM compliant to allow for sharing between content management systems as well as screen-reader compliant and self-paced. Large font print copies of the WBI instructional content were made available for vision- and/or hearing-impaired participants as needed. Current and future learners can cycle through the module as many times to ensure they acquire the desired skills.

Motivation and Attitude

This training module exists within the larger system of volunteer training as well as the larger environmental and cultural context of CYCL. To serve as a CYCL volunteer, participants must start with high levels of internal motivation. Completion of the required training prior to this module demonstrates the further commitment to the organization and its mission. These learners should, in theory, be primed for the learning experience.

However, completion of this module is a one-time mandatory requirement. While mandatory training does not allow participants to self-select their entry and typically negatively affects motivation, the designers ensured participants will gain tangible efficiency and efficacy in their overall information literacy to serve them both in this volunteer role and beyond. Typically, novice researchers overestimate their information literacy competency, so learners may have unfavorable attitudes toward the module topic, deeming it unnecessary. As the module will be required prior to officially becoming a volunteer and accepting crisis calls, any negative attitudes can be mitigated by appealing to the learners’ intrinsic motivations for volunteering and CYCL’s overall mission.

Expectations and Vocational Aspirations

As volunteers are often aspiring counselors and therapists who are beginning to pursue career goals via undergraduate education, they would have high expectations for the relevancy of their volunteer experience to this vocational path. Therefore, the module designers emphasized practical applications of the content throughout the module so learners could see the importance of strengthening their information literacy skills for their volunteer position, education, and future careers. This intentionality to meet the needs of the learners both immediately after the training,

“But I Know How to Google”

as well as the potential learning transfer in future positions, was a cornerstone of the design for this module. In designing with the system in mind, the practitioners took care to think about how the CYCL system feeds larger goals. Volunteers often move on to the professional vocations in which they study. This training was meant to help them contribute to the CYCL environment and beyond as they move on to other organizations and endeavors.

Decision-related Characteristics

When designing, the practitioners wanted to take into consideration how many learning decisions were left up to the participants. In this case, the CYCL administrators set the larger training curriculum and determined that all volunteers would be required to participate in the entire curriculum, with no exceptions. As a result, there were no additional characteristics dependent on participation decisions. However, as previously mentioned, the designers tried to ensure this mandatory requirement would be of value to the learners both immediately in their volunteer responsibilities as well as to their long-term professional goals.

Contextual Considerations

Delivery Setting

The delivery setting, or space and time within which learners engage in the training, is an important factor to consider up front when designing instruction. The instructional designers made sure to work with CYCL leadership to gain an understanding not only of their culture, but also the setting and infrastructure within which learners would access the training. The instruction required asynchronous, online delivery to account for the ongoing flow of new volunteers into the organization. The instructional designers selected TalentLMS (<https://www.talentlms.com/>) software, allowing participants to complete the training from any Internet-enabled computer instead of being required to complete the training on-site at CYCL. However, if participants do not have access to a computer or the Internet, the technology would also be provided at the CYCL office.

Because of the flexible nature of the delivery setting, the designers had little control over the learners’ environment as they complete the training, but it was important to consider the application setting as the training content must be ultimately used in a variety of unique, high-stress environments. Therefore, the instructional designers ensured learning transfer through generative learning strategies and high levels of learner involvement to ensure engagement. Within the training, the learners must work independently so high engagement would not result in competition with other volunteers.

Since CYCL staff has limited time to commit to live training, the designers aimed for an asynchronous course to stand alone without instructional facilitation. However, CYCL leaders and instructors have access to the course, learner work, and submissions. They were granted the ability to provide feedback to the learners and/or update content, as appropriate, through their administrative TalentLMS account. After completing the design of the module, staff should not require any additional support to launch or make changes to the content. However, the instructional designers remained available in case the CYCL staff requested support.

Application Setting

Just as the delivery setting is important, so too is the application setting. The designers of this module designed with the end in mind; they considered the environment in which the learners would need to perform and use their acquired knowledge and skills gained from the training. By considering the application setting in this way, the instructional designers ensured the training would be relevant and appropriate for the eventual setting in which the learners would use these skills. This is a best practice to ensure learning transfer.

The setting where participants must apply the module content is in the call center, which is a climate-controlled phone bank with cubicles for auditory privacy between volunteers. Volunteers must use their resource brokering skills in crisis scenarios, requiring the fast-paced application of tutorial content. They are expected to work a minimum of four hours a week in this environment, with at least one supervisor available on every shift. Supervisors also check in with volunteers quarterly for quality control and to ensure they are feeling prepared for calls. The designers wanted the training to promote self-efficacy, autonomous working habits, and creative problem solving to allow for innovation in the application setting. While volunteers are encouraged to be inventive in responding to the diverse needs of callers, they are not full-time employees, and CYCL has established clear and consistent expectations

“But I Know How to Google”

in the volunteer job description, policies, and procedures for quality assurance and assessment purposes. CYCL provides thorough training on these responsibilities prior to volunteers taking calls on their own. The application setting did not require any modifications to ensure quality performance and successful application.

Technology Concerns and Components

Learning Management System

The designers went to great lengths to select a learning management system (LMS) that would be appropriate for the learning delivery context. TalentLMS proved to be the most appropriate LMS for the unique needs of CYCL based on the organizational context. Since CCYL is a non-profit with a non-profit budget, it was important for the designers to take cost into consideration when selecting an LMS. TalentLMS offered a free account, which allowed staff to have access to the course for any content updates required over time. It also allowed for asynchronous delivery, which is important because the target audience includes volunteers onboard at non-fixed rates or time periods. Similarly, they will have varying schedules for training purposes so the LMS needed to accommodate that. Additionally, while other LMS options met these requirements, TalentLMS provided optimal functionality to meet the needs of the instructional content and objectives. Content can be delivered through uploaded video, text, graphics, audio, and knowledge checks, as appropriate. Essentially, this versatility ensured the instructional designers could maintain key multimedia principles, like using words and graphics instead of just words alone (Clark & Mayer, 2016). In terms of the invisible features, TalentLMS automatically records and stores data regarding course progression, responses uploaded by the learner, final test results, and course certificate award status, which follows best practices for assessment (Alessi & Trollip, 2001). These embedded features also empower CYCL leadership to use this data to monitor efficiency. Specifically, the number of module attempts, completions, duration of time spent, date started, and date completed can be pulled from the LMS periodically. The instructional designers will encourage the CYCL leadership to analyze these data for trends so that further adjustments can be made to ensure the course remains in demand and is as brief as is warranted.

Navigation

The navigation options leveraged within the course came embedded within TalentLMS. The navigation allows for pacing as a form of learner control such that learners advance through the linear progression of content by clicking a “Submit” button or then a “Completed. Let’s continue” button at the end of each content page or practice opportunity (Clark & Mayer, 2016). The top right corner of the screen contains a drop-down menu for the tutorial outline as well as forward and back arrows for additional learner-controlled navigation.

Display Layout

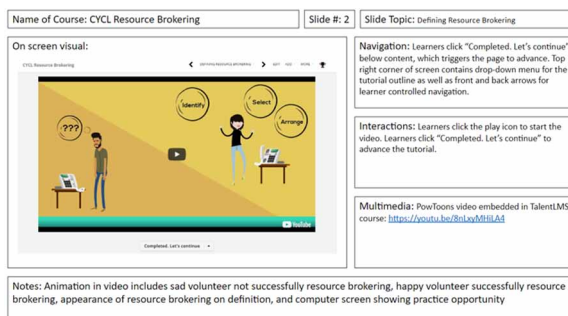
The overall display is also dictated by TalentLMS. Most of the navigation options run across the top of the screen, allowing the largest amount of real estate for the course content. The display layout allows for a number of the multimedia principles to be maintained. For those pages that leverage words and graphics, the words are aligned to their corresponding graphics to maintain the contiguity principle (Clark & Mayer, 2016). For each of the video components, the designers leveraged words as audio narration rather than text onscreen with the exception of posting short, novel, salient terms on screen. In this way, the modality and redundancy principles were upheld (Clark & Mayer, 2016). As seen in Figure 1, the designers utilized storyboards to intentionally develop the visuals and fully utilize the affordances of TalentLMS. The storyboards ensured the multimedia principles were not violated while also providing consistency in style and formatting.

Fidelity Levels

This training was systematically designed with motivational consideration using Keller’s (1983) ARCS model to ensure the instructional content supported mastery of the stated objectives. The ARCS Model—with designers making considerations for Attention, Relevance, Confidence, and Satisfaction—is a motivational framework meant to serve as an overlay model to be used in conjunction with the designers’ systematic processes. Including Keller’s model in the design allowed the designers to map the objectives and the training’s purpose to the course sequencing, knowledge checks, the complexity of content, and both formative and summative assessments. The mode of display for presentation of content was designed in consideration of

“But I Know How to Google”

Figure 1. Screenshot of storyboard used for designing training content and visuals



Mayer’s principles of multimedia learning to most effectively engage students and integrate new knowledge. The user control of navigation and immediate feedback was somewhat limited by the selection of the LMS. The justification for accepting these constraints is described above in the LMS Selection section, and multimedia design best practices were considered to take advantage of the affordances allowed by TalentLMS to provide reduced user control for the novice learners and immediate constructive feedback.

Interaction Levels

Much like the task orientation, the learner interaction levels with the content are high to ensure they can transfer their skills to the performance context (Morrison, Ross, & Kemp, 2007). Several practice opportunities, including a case study, are provided throughout the course to ensure learner engagement. That level of engagement is also extended beyond content interaction to learner-to-learner interaction through an asynchronous discussion board activity involving sharing resources.

CURRENT CHALLENGES FACING THE ORGANIZATION

It was important to ensure CYCL staff felt the design addressed the actual gap in volunteers’ skills. The designers presented the client with a course design document once the initial drafts of the training were completed for feedback and comments. As they previously shared, the client organization reported their volunteers to have gaps in required resource brokering skills, which are the foundation of their primary

responsibilities of recommending appropriate and credible resources based on the caller need. After reviewing the proposal, client feedback was overwhelmingly positive, with one stakeholder writing, “This all looks really great! An employee was also saying he learned something too! This is going to be incredibly useful for our volunteers!” The client was also onboard with the LMS recommendation, addressing another initial organizational concern. The designers moved on to the development stage to create the training that would go live and address the volunteers’ challenges with resource brokering.

SOLUTIONS AND RECOMMENDATIONS

To address the instructional problem, the instructional designers collaborated with the client to conduct a thorough up-front analysis and established the following learning objectives:

1. Upon completion of the online training module, CYCL volunteers will align three of three essential resource brokering functions to volunteer responsibilities.
2. Upon completion of the online training module, CYCL volunteers will describe how resource brokering aligns with volunteers’ individual vocational aspirations.
3. Upon completion of the online training module, CYCL volunteers will demonstrate search strategies recommended in the tutorial for a provided case study for at least 15 minutes.
4. Upon completion of the online training module, CYCL volunteers will explain three of the five demonstrated evaluation techniques.

Each of these learning objectives is aligned with the organizational objective to increase callers’ stated satisfaction with the resources following interactions with CYCL volunteers by 10 percent.

DESIGN SOLUTION FOR OBJECTIVE ONE

Initial Presentation

Beginning with a motivational strategy, the learners are presented with a split image graphic representing what happens when essential resource brokering functions are not leveraged in a call and what happens when they are. The first, smaller image shows a distraught volunteer on the phone with a question mark within a thought bubble to represent a CYCL volunteer upset they are not able to meet the caller’s needs. The second image shows a confident, happy volunteer on the phone with the three essential elements of resource brokering as text within a thought bubble to represent the best practice of leveraging resource brokering. Voice narration explains that identifying, selecting, and arranging resources are essential functions of resource brokering and the job of a CYCL volunteer.

Generative Strategies

Utilizing the participants’ internal motivation to volunteer at CYCL, the module presents a transcript of a crisis call where a caller’s needs were not met by the provided resources. The designers chose this to serve as a non-example case study and provide learners with an opportunity to emotionally connect with critical outcomes when resource brokering is not properly leveraged on the job. Participants are asked to reflect on what went wrong with the call and elaborate on what they would improve through a series of interactive low-stakes knowledge checks. This exercise establishes the relevance of finding appropriate resources as a means to improved outcomes for callers.

The multimedia platform then presents a summary of the CYCL volunteer position description in a bulleted list on the screen. Participants are also able to review the full job description in the module handout. Via multiple-choice, multi-response items, participants select volunteer responsibilities as stated in their job description that relates to finding resources for potential callers. The multimedia platform then revisits the definition of resource brokering. Via an interactive, matching item, participants are asked to complete a table where they match key aspects of the volunteer responsibilities with the three concepts found in the resource brokering definition. To enable recall, the module then repeats the definition of resource brokering.

Within the module, participants are asked to consider their shadow experience during their training. Participants then recall the topics of the calls they observed during this period. Topics might include but are not limited to needs for housing, transportation, mental health services, job opportunities, or a combination of these. In a non-evaluated, interactive item, participants will then be asked to list these topics and any specific resources they remember being recommended during the call. While participants can enter this information on a screen, space is also provided in their module handout so they can keep it for later reference. Integration then occurs as participants work through each of the interactive items listed above and reflect on the case study as well as their buddy training experience.

Design Solution for Objective Two

Initial Presentation

Participants are provided a visual graphic representing a network of connections that show a physical connection between the three essential functions of resource brokering presented in text and various occupations of potential interest to the volunteers, such as social worker, counselor, or teacher. “Resource Brokering and the Future You” as the title text displays above this graphic. The voice narration states: “Resource Brokering and the Future You...what do they have in common? Let’s explore how resource brokering skills will serve you today as a CYCL volunteer, but also in any of your vocational aspirations.”

Generative Strategies

Participants recall the completed module activities and paraphrase the resource brokering definition, summarizing its importance to the CYCL volunteer position as well as their vocational aspirations. The multimedia platform restates the definition of resource brokering and prompts the learners to reflect on their motivations for volunteering at CYCL as well as their vocational aspirations. This repetition of the resource brokering definition continues to encourage recall. They will also elaborate on the definition by connecting the new concepts to their established understanding of the volunteer position and their vocational aspirations.

Specifically, the module then introduces participants to “Anne,” who works as a social worker. Serving as a model or example, “Anne” narrates the two ways she uses resource brokering in her work. The module then introduces “Marcus” who works as a K-12 educator. Marcus states three main tasks he frequently completes in that

“But I Know How to Google”

occupation. Via a multiple-choice item, participants select the appropriate component of resource brokering that is most applicable to Anne and Marcus’ statements. Finally, participants record their reflections on how the resource brokering components relate to their own specific vocational aspirations in their module handout.

Design Solution for Objective Three

Initial Presentations

This module presents an arrangement of logos representing a number of search tools like Google, Google Scholar, the local library website, the local government website, and the state government website. The text above this graphic and voice narration state “Recommended Search Strategies.” Voice narration continues introducing the search tools recommended in this module. As each example is explained, the corresponding logo is highlighted.

Following this presentation, the graphics display advances to display logos and text associated with the source types. The voice narration defines the operational definition of search tools used in the tutorial, highlighting features of each tool and presenting the possible source types that might be found in these tools (e.g., journal articles, government information, personal websites, organizational websites, news articles, and other miscellaneous sources).

The module then provides a model simulation on how to select a search tool based on the source type appropriate to a caller’s need by using a worked example. The voice narration emphasizes the importance of selecting an appropriate search tool by demonstrating a search using an inappropriate search tool. The module concludes with another model simulation of advanced search strategies, including how to filter search results, select keywords, and use advanced search strategies in Google.

Generative Strategies

Via a multiple choice, multiple response item, participants select the characteristics they would look for to distinguish between at least two of the presented source types. The multimedia platform then provides a link to a job aid that lists the different source types used in the training, possible characteristics that would help identify the source types, and the possible uses of information found in each of the source types. The voice narration notes the job aid is also provided in the module handouts.

The voice narration also reminds the participants of the difference between search tools and source types to rehearse that content. Participants then identify which source types would most likely be found in the different search tools via selecting the appropriate responses to an interactive multiple-choice item. The feedback on this item summarizes the purpose of each of the search tools and provides a job aid that identifies what search tool would be most appropriate to find specific source types. The module then prompts participants to refer to their module handout to practice selecting the search tool using an example relevant to their volunteer position. Using the list they created of common topics discussed during their shadow training, participants create a table of call topics matched with source types that might be expected to meet the needs of a caller discussing that topic.

For additional practice, the module prompts participants to reference the case study provided at the beginning of the training. Through a series of multiple-choice interactive items, participants correct the errors made by the volunteer in the transcript by first identifying the caller’s correct need. Using the table they created, participants identify an appropriate source type and search tool from the options provided.

Participants then practice applying the search strategies in a recommended search tool appropriate to the needs of the caller in the case study. Participants select appropriate keywords, apply at least one applicable filter, and, when applicable, at least one Google search strategy. Finally, participants reflect on the search practice by identifying what went well, what did not go well, and what they would do differently next time.

Design Solution for Objective Four

Initial Presentation

The module presents an image of a CYCL volunteer surrounded by icons representing various online sources of information. The volunteer has a perplexed look on their face. On-screen, text presents the words “Currency, Relevance, Accuracy, Authority, Purpose.” The voice narration states, “As a CYCL volunteer, you will need to evaluate online sources to ensure you provide valid information to the callers. Let’s find out how you can avoid the CRAAP by checking for currency, relevance, accuracy, authority, and purpose.” As each word of the CRAAP acronym is stated, each word on the screen is highlighted.

Generative Strategies

The mnemonic of CRAAP assists with participant recall of the evaluation techniques. Additionally, participants have an opportunity for overt practice for integration. As described, the voice narration presents information about how difficult it can be to evaluate authority and credibility when using online sources. The module presents an image of a CRAAP rubric on screen with a reminder that the rubric is also provided in their module handout. This rubric is in place to help learners evaluate information based on its currency, relevance, accuracy, authority, and purpose. Via interactive multiple-choice items, participants select at least three appropriate elements of CRAAP and complete the rubric columns onscreen for those three elements using two sources they found during the previous search activity. The module prompts the participants to recommend one of the resources to the caller in the provided case study; they need to enter text into an open-ended item to demonstrate they have completed that step. The feedback provided to the learner re-states the requirements of a credible source and reminds the learners that if the resource passes the CRAAP evaluation, then it should be able to serve as a reputable source to recommend to a caller.

Justification of Design Characteristics

Organization

The designers were very deliberate in terms of the organization of this module. As indicated in the learner analysis, CYCL volunteers are successful when they are motivated, especially when the work calls for them to perform under stressful circumstances or with sensitive content. For that reason, and in accordance with the design decisions outlined above, the practitioners sequenced the course to target the learning objectives in the affective domain first. Table 1 provides a description and justification for the overall course organization as it aligns with the learning objectives.

Table 1. Description of design justifications

Course Section	Learning Objectives				Justification
	1	2	3	4	
Section One: Welcome Overview Learning Objectives Navigation Instructions					While this section does not specifically address the terminal learning objectives, as is a best practice for tutorials, it provides learners with the purpose of the instruction via the presentation of the behavioral learning objectives (Alessi & Trollip, 2001). All of this is handled with a polished animated video, which also serves motivationally to gain the learner’s attention, which, per Keller’s (1983) ARCS model, calls for arousal that is then maintained throughout the course (Richey, Klein, & Tracy, 2011). This section sets the tone for the course in terms of the personalization, or informal language, and embodiment principle. The video leverages an avatar that displayed human-like gestures (Clark & Mayer, 2016).
Section Two: Defining Resource Brokering Call Transcript CYCL Volunteer Position Resource Brokering Practice Opportunity Shadow Experiences	X	X			Sections two and three primarily address the learning objectives within the affective domain. As such, the content serves to further motivate learners, because motivation not only arouses the learner but often accounts for the sustenance of behavior (Hardré, 2003). Specifically, these sections aim to establish relevance. Within Keller’s (1983) ARCS model, relevance is achieved when learners perceive their own needs are met within the instructional environment. By ensuring that learners have realistic expectations about themselves, other learners, and the instructional content, learners increase their confidence in the overall process.
Section Three: Resource Brokering and the Future You Your Career Aspirations		X			
Section Four: Source Types Finding Source Types in Search Tools Shadow Experience Practice Opportunity Selecting a Search Tool & Advanced Search Strategies Case Study Practice			X		Sections four and five cover the main content for learners. Now that the foundations of motivation have been laid, they are primed to receive this new content through modeling, worked examples, practice questions, and feedback. The case study continues throughout these sections to add an element of problem-focused instruction. In a few instances the learner is instructed there are no right answers; they are free to explore and come up with their own reasoning and rationale (Clark & Mayer, 2016).
Section Five: Is it CRAAP? Evaluati ofon of Practice Opportunity Resource Recommendation Practice Opportunity Discussion Board Living Resource				X	
Section Six: Wrap Up Final Assessment	X	X	X	X	The final assessment includes a combination of multiple-choice questions, matching questions, and completion questions. The multiple-choice questions are appropriate for factual informatin but have stems and distractors written in a way to get at higher order thinking. The matching questions are included to ensure the learners have acquired the explicit concepts and key terms intended to be learned. Finally, the completion questions ensure the learners have acquired the salient terms they need to be able to reference within the performance context on the job (Alessi & Trollip, 2001).

A Pilot for Design Refinement

Prior to presenting the final product to the client, the designers completed a beta test on the developed training. The practitioners solicited feedback from Ph.D. students in Old Dominion University’s instructional design and technology program to evaluate the training’s instructional soundness, appropriateness, and feasibility of the course via design and content reviews. The designers adjusted course materials based on the reviewer comments, as appropriate. They leveraged this feedback to ensure the overall design would meet the needs of the clients and organization overall.

The instructional designers also sent the beta version to the CYCL stakeholders for additional comments. The designers remained in communication with CYCL stakeholders during the development of the tutorial to ensure alignment with organizational goals. Prior to the final deployment of the training, CYCL will pilot the course with a sample of their volunteers to provide better insight into the appropriateness of the time required to complete the multimedia instruction, the interface usability, and any other feedback that would be valuable from a participant perspective. The pilot will help to iron out any remaining kinks and further solidify the design. To obtain these data, at the end of the pilot launch of the module, pilot participants will complete a short reaction survey available in Appendix 2. After completion of the formative evaluation, changes will be made to the tutorial prior to implementation.

APPROACH TO EVALUATION

When designing interventions within the Human Performance Technology framework, the goal is to “improve productivity in organizations” (Pershing, 2006, p. 6). In this instance, the organizational measure of success is whether or not this intervention helps to achieve the goal of increasing callers’ stated satisfaction with the resources following interactions with CYCL volunteers by 10%. This type of end can only be determined via measures of evaluation. While there are many summative methods of approaching evaluation, such as the Kirkpatrick model (1996), the overall framework elected for this effort was the *ROI Methodology*TM [trademark of ROI Institute, Inc.] (Phillips, 2017; Robinson, Robinson, Phillips, Phillips, & Handshaw, 2015). Otherwise known as the Phillips model of evaluation, this methodology includes the following levels of evaluation:

- **Level 1:** Measure of participant reaction;
- **Level 2:** Measure of learning;

- **Level 3:** Measure of performance or job application;
- **Level 4:** Measure of organizational business impact;
- **Level 5:** Measure of return (i.e., benefits of the program) on the investment (i.e., cost of the program).¹

The main reason for selecting this methodology was its inclusion of the guiding principle to isolate the impact of the specific intervention. By selecting an appropriate method of isolation, the designers can ensure that any results or outcomes are actually attributable to the intervention they designed (DeTuncq & Pinckney-Lewis, 2017; Phillips, 2017; Robinson, et al., 2015). Table 2 summarizes how the designers addressed each of these levels of evaluation.

RECOMMENDATIONS FOR THE FUTURE

The instructional designers, in this case, designed an eLearning intervention with special attention to learner characteristics, organizational context, and principles of multimedia design. As with any learning intervention, this one should be revisited over time for several reasons. First, CYCL leadership will need to review how well the course is meeting their needs. The results of the quarterly data to be obtained from the checklist described above can help CYCL supervisors determine if the participants found the training beneficial. If quality assurance monitoring indicates volunteers who completed this training are more successful in resource brokering, the module will be added to the required training for all new volunteers as well as the annual continuing education training list. Second, over time, CYCL might slightly alter its mission, which in turn might alter its strategic goals and expectations of its volunteers. Should any organizational changes shift that would modify the desired knowledge and skills for volunteers, the training content within this module should be revisited to ensure continued alignment with the organizational goals.

Finally, as the needs of the organization and the structure of the recommended resources evolve, the training should be responsive rather than static. The designers developed the module within the context of CYCL in its current state, the systematic process representing the prevailing volunteer recruitment structure, administration, and resources available to California residents. As with all systemic designs that consider the needs of the organization, the training should be updated in reaction to organizational changes. This case study represents two designers' design, development, and evaluation processes in using systems theory for resource brokering training.

“But I Know How to Google”

Table 2. Instruments used for levels of evaluation

Level of Evaluation	Evaluative Instrument	Description of Instrument
Level 1: Reaction	Participant Reaction Survey	Similar to the survey to be administered in the pilot, this survey will capture the level of satisfaction participants have with the module (see Appendix 3).
Level 2: Learning	Knowledge checked embedded within the module End of module multiple-choice assessment	Both instruments served to assess learning against each of the four learning objectives Specifically, the end of module assessment includes: <ul style="list-style-type: none"> • Items requiring participants to align three of three essential resource brokering functions to CYCL volunteer responsibilities. • Items requiring participants to describe how resource brokering aligns with sample vocational aspirations. • Items connected to a case study, within which participants will need to identify appropriate search strategies. • Items requiring participants to use the CRAAP rubric to evaluate at least two sources. Appendix 4 provides a table of specifications for this assessment.
Level 3: Transfer	Job Transfer Evaluation Survey	The designers recommend this survey to be given to participants one month after completing the module to determine how much of the initially acquired knowledge and skills actually transfer to the application context. The last three items in the survey address the isolation of training impact. They ask participants to indicate their ability to perform their job, how much of that ability they attribute to this module, and how confident they are in that estimate. See Appendix 5 for the complete text of the participant job transfer survey.
Level 4: Organizational Impact	Additional Items for the Supervisor Quarterly Quality Assurance Checklist	As CYCL supervisors monitor all volunteer performance once they take crisis calls independently, they can make note of those volunteers that completed the module. As indicated in Appendix 6, specific questions can be added to the supervisor’s quarterly quality assurance checklist to determine if volunteers are appropriately recommending resources and employing the strategies recommended in the training. Supervisors can also follow up with volunteers during their quarterly reflections to determine if the volunteers feel they were appropriately trained for resource brokering.

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“But I Know How to Google”

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KEY TERMS AND DEFINITIONS

ARCS Model: Developed by John M. Keller (1983), this motivational model is an overlay framework to be used in parallel to other design models. Designers should consider a learner’s Attention, the content Relevance in the context of the learner, the learner’s Confidence in being successful in the lesson, and the learner’s Satisfaction in achievement.

CRAAP: An acronym referring to source evaluation techniques: currency, relevance, accuracy, authority, and purpose.

Information Literacy: The reflective discovery of an information need, recognition of how to identify appropriate resources to meet this need, and process of evaluating credibility and authority of information once a resource is found.

Learner Analysis: Process of capturing information about the intended learners of an intervention (i.e., demographics, specific characteristics, motivation, attitudes, expectations, aspirations) to better inform the design of the intervention.

Resource Brokering: The identification, selection, and arrangement of resources dependent on the specific callers’ needs.

ROI Methodology™: A systematic process involving the targeted collection of data that enables practitioners to show the value of their interventions.

SCORM Compliant: An acronym that stands for Shareable Content Object Reference Model that refers to standards allowing interoperability between eLearning platforms.

Systems Theory: Interdisciplinary design theory that attempts to describe how interdependent parts are structured, related, and interact to affect the whole of the system.

ENDNOTE

¹ The level five evaluation was not implemented in this design, given that CYL is a non-profit organization and the performers are volunteers to that organization.

APPENDIX 1: QUESTIONS FOR DISCUSSION

1. Learner analysis played an important role in this design. Based on the information provided in this case, are there other design considerations you would put into place? How do you leverage up-front analysis to influence your design practice?
2. Only in very rare occasions do instructional designers get to design with an unlimited budget. This case was no exception as the instructional designers were serving a non-profit organization as their client. What were the main sacrifices you felt the instructional designers made due to the budgetary constraints? How have you dealt with design constraints within your practice?
3. The performance context also played a large role in the design plan for this training module. In what ways did you find the work environment considered in the design? In what ways would you improve upon this design to ensure the learners would have optimal learning transfer to their performance environment?
4. The LMS selection played a significant role in design decisions for this training. Discuss how you view LMS selection as influencing design decisions in your practice.
5. How are the levels of evaluation used in this design? Discuss how the levels incorporated align with the objectives.
6. What role do you think affective objectives play in a training focusing on the cognitive strategies domain?

APPENDIX 2: PILOT PARTICIPANT REACTION SURVEY

For each statement on the left of the table, place an X in the box corresponding to the degree to which you agree with the statement.

Please complete the following feedback prompts.

8. What worked well was....
9. What did not work well was...

Table 3.

Statement	Level of Agreement				
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. The multimedia module prepares participants to align three of three essential resource brokering functions to volunteer responsibilities.					
2. The multimedia module prepares participants to describe how resource brokering aligns with volunteers' individual vocational aspirations.					
3. The multimedia module prepares participants to demonstrate search strategies recommended in the tutorial for a provided case study for at least 15 minutes.					
4. The multimedia module prepares participants to explain three of the five demonstrated evaluation techniques.					
5. The time required to complete this multimedia module was appropriate.					
6. The multimedia interface, including course navigation, was easy to use.					
7. The instructional strategies were effective and appropriate for the content.					

APPENDIX 3: PARTICIPANT REACTION SURVEY

For each statement on the left of the table, place an X in the box corresponding to the degree to which you agree with the statement.

Please complete the following feedback prompts.

10. What worked well was....
11. What did not work well was...

“But I Know How to Google”

Table 4.

Statement	Level of Agreement				
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I was aware of the concept of resource brokering prior to this training.					
2. The material in this training will be useful to me as a CYCL volunteer.					
3. The multimedia module prepares participants to align three of three essential resource brokering functions to volunteer responsibilities.					
4. The multimedia module prepares participants to describe how resource brokering aligns with volunteers’ individual vocational aspirations.					
5. The multimedia module prepares participants to demonstrate recommended search strategies for a case study for at least 15 minutes.					
6. The multimedia module prepares participants to explain three of the five demonstrated evaluation techniques.					
7. The time required to complete this multimedia module was appropriate.					
8. The multimedia interface, including course navigation, was easy to use.					
9. The instructional strategies were effective and appropriate for the content.					

**APPENDIX 4: LEVEL 2 ASSESSMENT
TABLE OF SPECIFICATIONS**

As a reminder, here are the learning objectives for this module:

1. Upon completion of the online training module, CYCL volunteers will align three of three essential resource brokering functions to volunteer responsibilities. (LO1)
2. Upon completion of the online training module, CYCL volunteers will describe how resource brokering aligns with volunteers’ individual vocational aspirations. (LO2)

3. Upon completion of the online training module, CYCL volunteers will demonstrate search strategies recommended in the tutorial for a provided case study for at least 15 minutes. (LO3)
4. Upon completion of the online training module, CYCL volunteers will explain three of the five demonstrated evaluation techniques. (LO4)

APPENDIX 5: LEVEL THREE EVALUATION: PARTICIPANT JOB TRANSFER SURVEY

For each statement on the left of the table, place an X in the box corresponding to the degree to which you agree with the statement.

For each of the items below, respond with the appropriate percentage.

1. In terms of a percentage, how much of your level of confidence as indicated in statement three above do you attribute to the multimedia module training?
0 percent attributed to the course – 100 percent attributed to the course:

2. In terms of a percentage, how confident are you in that estimate?
0 percent confident – 100 percent confident: _____

Table 5.

Assessment Item #	LO1: 40% weight	LO2: 40% weight	LO3:	LO4: 20% weight	Assessment Level
1	X	X	This objective was assessed in its entirety within the module knowledge checks. The case study ran throughout each module section.		Knowledge
2	X	X			Comprehension
3	X	X			Application
4				X	Application
5				X	Application
6		X			Comprehension
7				X	Knowledge
8	X				Comprehension
9	X	X			Application
10	X	X			Knowledge

“But I Know How to Google”

Table 6.

Statement	Level of Agreement				
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. Since taking the multimedia module, I have leveraged resource brokering techniques.					
2. Since taking the multimedia module, I have evaluated online sources prior to making recommendations to callers.					
3. I am able to successfully perform my duties as a CYCL volunteer.					

APPENDIX 6: LEVEL 4 EVALUATION: QUESTIONS FOR QUARTERLY SUPERVISOR CHECKLIST

The following items should be added to the existing Quarterly Supervisor Checklist:

- Volunteer is recommending appropriate resources to callers in crisis
- Volunteer is employing appropriate resource brokering strategies (i.e., identification, selection, and arrangement of resources dependent on the specific callers’ needs)
- Per volunteer reflection, volunteer reports being appropriately trained for resource brokering responsibilities
- Current rate of caller satisfaction is: _____. (Indicate whether or not this meets the organizational objective to increase callers’ stated satisfaction by 10%: _____)

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* * *

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About the Contributors

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Index

5i Model 287, 294, 296, 303
5-tier sales funnel model 287, 296

A

A Priori Coding 268
Accomplishment 40, 172
Accreditation 80-81, 103-104, 106, 127-128, 138
Active Learning 125-126, 131-132, 140
ADDIE 227, 232, 234-235, 244, 246-247, 277
ADDIE Model 232, 234-235, 244, 246, 277
Adjunct Instructor 112, 114-120, 123
Adjunct Instructors 109, 111-121, 124
ARCS Model 314, 328
Attrition 201, 217-218, 220-221, 223-225
Authentic Learning 109, 117, 119, 121
Autism 142-147, 150, 154, 159-161
Autism Spectrum Disorder 142-143, 159
automotive 2, 18, 24, 249

B

Bagging 281, 285
Barriers 19, 83, 125, 142, 147, 150-152, 160-161, 223, 251, 264, 271, 327
BDM 3-6, 8, 10-15, 17-20, 24
Behavior 11, 24, 37, 40, 66, 98, 163, 165, 170, 172-174, 177, 207, 209-212, 214, 225, 262, 268
Behavior Engineering Model 11, 24, 170
Benchmarking 248, 250, 254-256, 260, 262-269

Bloom's Taxonomy 6, 22, 24, 239
Budgeting cycle 35

C

California Coalition for Youth 306, 326
Captive Finance Company 24
Cause Analysis 42, 50, 56
Certification 3, 12-13, 15, 17, 19, 28, 34, 62, 80-82, 85-88, 93-95, 97-99, 101-102, 104-106, 127, 159, 326
Certified Performance Technologist 86, 91, 106
CEU 201, 205, 213, 225
Champion 25, 27-31, 33-35, 41, 238
Change Agent 77
Civil Work 180, 199
Classroom Management 201, 206, 208, 211, 214, 218, 221-225
Clients 31, 54, 61, 68, 84, 86, 92, 142, 146, 148, 151, 153-157, 161, 164, 166-171, 173-175, 187-188, 191, 194, 232, 255, 271, 308, 323
Collaboration 17, 70, 87, 125, 143, 171, 191, 216
Collegiality 77
Conglomerate 178, 188
Constituent 154-155, 225
Constituents 146, 154-155, 207
course design 64, 72, 83, 97, 99, 277-279, 315
CRAAP 320-321, 328
Customer Connection 294, 303

Index

D

Design Thinking Method 287, 290-291, 293, 303
designing instruction 270, 311
digital transformation 288, 290-291, 299-301
Digital Transformations 303
Discipline 18, 37, 77, 83, 94, 182, 205-206, 210-211, 214-215, 219, 221-222, 225, 268
Discrepancy Analysis 147-148, 161
Display Panels 126, 129, 132-133, 140
Durability 25, 35, 37

E

Efficacy 145, 147-148, 150, 152-153, 158, 161, 238, 310
Empathy 154, 161, 292
employee development 227
Employer of Choice 181, 248, 252, 254-255, 261-264, 267-269
Environmental Analysis 46, 56
Essential 7, 35, 93, 154, 236, 268, 308, 316-318, 331
Exemplary Performance 163, 165, 172, 174, 178-179
experiential learning 270, 274-275, 279-284, 286
Expertise 50, 63-66, 68-69, 75, 77, 86, 191, 194, 292, 308
External Benchmarking 254, 268

F

Facebook 149, 258, 293-294, 296, 298-299
Faculty 43, 45-48, 51-52, 54, 58-75, 77, 79-81, 85-86, 89, 95, 99-100, 102, 110-112, 114-120, 123, 126-133, 135-136, 139, 160, 218
Faculty Member 51, 63-64, 66, 70, 73-74, 77, 112, 123, 126-127, 130, 218
Feasibility Analysis 54, 56
financial services 1-2, 85, 288
Flexibility 38, 66, 73, 259
Forklift Safety 28, 31

Formative Evaluation 232, 234-235, 237, 241, 323
Franchise Business Model 249, 268
Franchisee 248-252, 255, 259-260, 262-263, 265-266, 268
Franchisees 248-263, 269
Franchisor 248-251, 253, 262-263, 265, 268-269
Front-End Analysis 40

G

Gap Analysis 1, 3-4, 6, 9, 11-19, 24, 48-49, 56, 114, 116, 123, 152, 270, 275-276, 278
Greenfield Project 246

H

High Performer 4, 11-12, 24
Higher Education 43, 56, 58-62, 68, 75-77, 79-81, 94-95, 97, 99, 106, 111-112, 123, 139, 160, 181, 217, 221, 284
high-trust customers 289, 293, 297
Human Performance Technology 38, 42, 83-85, 105, 107-108, 143, 159, 291, 302-303, 323, 326-327
Human Resource Management 55, 249, 253, 255, 264-266, 268
Human Resource Practices 177, 244, 263, 266, 268

I

Independent Contractor 178, 188
Indian Rupee (INR) 199
Influences 40, 59, 136, 262
Information Literacy 305, 308, 310, 328
Institution 29, 43, 58, 62-63, 70, 75, 81, 97, 100, 181, 190
Instructional Design 48, 51, 59-61, 63-69, 71, 73-76, 83, 110-112, 117, 123, 145, 157, 203, 230, 233, 235, 240, 244, 307-308, 323, 326-327
Instructional Designer 59, 62-63, 65, 75, 77, 109, 111, 115, 118, 201, 231, 233, 241
instructional intervention 227

Instructor Station and Terminal 140
 insurance agents 287-289, 293-297, 299,
 301, 303-304
 Internal Benchmarking 254, 268-269
 Isolation Technique 153, 161

J

job analysis 5-6, 54, 250
 Job-Aid 123, 230
 Joint Employer 250, 262, 268-269

K

Kinesthetic Learning 140

L

Lay-Up 281-282, 285
 Lead Instructor 113, 123
 Learner Analysis 305, 321, 328-329

M

Manufacturing Process Standards (MPS)
 285
 Motivation 46-47, 109, 221, 304, 310, 317,
 326, 328
 Moveable Projector Screens 140
 Multimedia Design 308, 315, 324

N

Needs Analysis 120-121, 128, 225, 275
 Needs Assessment 121, 128, 130, 142,
 144-150, 152-155, 157-162, 201, 203,
 206-208, 214, 220-221, 225, 326
 Nepotism 164-165, 167, 174, 177-178

O

Online Pedagogy 66, 72-73, 77

Organization 1-2, 18-19, 22, 24-26, 29-30,
 37-41, 43-44, 50, 52, 56-57, 59, 66,
 77, 79, 81-82, 94-95, 106, 110, 126,
 132, 140-146, 150-154, 157-158, 161,
 163-164, 166-168, 171, 173-174, 179-
 184, 187, 190-195, 199, 202, 210, 214,
 216, 219, 225, 227-229, 232, 238, 242,
 249, 254, 261, 266, 268-269, 271, 273-
 275, 279, 283, 288-289, 295, 305-307,
 310-311, 315, 321, 323-324, 328-329
 Organization Objectives 40
 Organizational Analysis 56, 264
 Organizational Expansion Failure 179
 OSHA 28, 40

P

Parent Efficacy 142, 145, 147-148, 150,
 152-153, 158, 161
 People Oriented Culture 256
 Performance 3-8, 10-15, 18-26, 28-31, 33-
 42, 50, 53, 55-58, 70-72, 74-75, 77,
 79, 81, 83-87, 91, 94, 97-99, 103-109,
 114-115, 117, 120-122, 143-145, 152-
 154, 159-161, 163, 165, 167, 169-174,
 176-179, 185, 192, 197, 200, 206-207,
 210, 221-222, 225-226, 232, 234, 243,
 249-250, 253-257, 260, 262-265, 267-
 268, 270, 272, 280-281, 283-284, 291,
 293, 295, 299, 302-303, 305, 313, 315,
 323-324, 326-327, 329
 Performance Analysis 41-42, 56, 305
 Performance Gap 3, 12, 24, 50
 performance gaps 3, 12, 210, 225, 291
 Performance Improvement 3, 8, 12-13, 21,
 23, 33, 37, 42, 55, 77, 79, 81, 83-87,
 97, 99, 103-108, 143-145, 159-160,
 163, 167, 170, 176-179, 200, 221,
 226, 291, 302, 326-327
 Performance Map 5-7, 13-14, 18, 24
 performance mapping 1, 3-5, 13
 Policies, 25, 29, 203, 313
 Policy 30, 69, 132, 136, 215, 222-223,
 264, 306
 Practitioner-Participant 156
 Price Elasticity 228, 246

Index

Primary Service Recipients 146-147, 150-154, 156-157, 161
problem-based Instruction 270
Professional Development 2, 45, 82, 95, 127, 133-134, 137-138, 141, 201-205, 208-210, 212-213, 215, 217-218, 220-221, 224-226
Professional Duty 66, 68, 75, 77
Project Management 80-83, 85-87, 90-95, 97-99, 102-108, 188, 232, 235-236, 293-297, 299-300

Q

Quality 2, 7, 17, 64, 66-68, 72, 74-75, 77, 80-83, 85, 94-95, 102, 107, 110, 167, 170, 173-174, 182-183, 185, 187, 192-194, 238, 249, 251, 254, 263-264, 267, 270, 283, 312-313, 324
Quality Assurance 77, 238, 313, 324
Quality Matters 64, 67, 72, 74-75, 77

R

Rapport 64, 66, 68, 75, 78, 309
Relationship Imbalance 67, 78
Renovation 125-127, 129, 133, 136
Resilience 25, 34, 194, 220
Resource Allocation 42, 56
Resource Brokering 308, 312, 315-319, 324, 328, 331, 333
Retention 23, 190, 201, 203, 206, 216-218, 220-224, 236, 242-243, 255-256, 261
ROI MethodologyTM 323, 328

S

Safety 28-31, 34, 38, 40, 160, 182
SAM 164, 227, 235, 240, 244, 246-247
SAM Model 246
SCORM Compliant 310, 328
Search Stage 255
Self-Efficacy 62, 70, 109, 115, 217, 312
Social Sales Model 287, 290-291, 293-294, 296, 299-301, 303-304
social selling process 296-297

Stakeholders 43, 45-46, 52, 54, 56, 86-87, 92, 128, 141, 147, 156-157, 161, 165, 175, 207, 221, 268-269, 278-279, 283, 286, 288, 323
Steering Committee 261, 263, 268
Subject Matter Expert 186, 246
Summative Evaluation 232, 243
Support, 17, 29, 114, 120, 136, 190, 299, 306
System 17, 19, 25-28, 30, 33-37, 40-41, 43, 59, 71, 74, 87, 125, 129, 131, 135-136, 150, 153, 165-166, 192-194, 209, 211, 213-214, 225, 230-233, 240, 250-251, 253-255, 260-262, 269, 279, 291, 295, 305, 309-311, 313, 328
Systems Theory 40, 324, 328
Systems Thinking 179, 192, 305

T

task analysis 5, 24, 279, 281
Teaching and Learning Center 42, 56-57
Tooling 279-280, 282, 285
Traditional Sales Model 289, 303-304
Training 1-5, 7-8, 10-13, 15, 17-18, 21, 23, 25-26, 28, 30-35, 38-39, 41, 45, 58, 62-68, 70-75, 79, 82, 95, 97, 109, 113, 115-122, 125, 127, 129-134, 136-137, 141, 144, 160, 164, 167, 170, 172-174, 204, 217-218, 223, 225-227, 229-236, 238, 240, 242-244, 250, 253, 256-259, 261, 263, 270, 272, 274-275, 277-284, 286, 291, 297, 299, 307-316, 318-320, 323-324, 329, 331-332
Training and Development 21, 122, 230, 236, 238, 242-243, 250, 253, 256, 259, 263, 307-308
Training Interventions 58, 71
Training Series 125, 133-134, 136-137
Triangulation 207, 225, 255
Turnover 179, 191, 201-203, 205-206, 208, 223, 225-232, 236, 238, 243-245, 251, 255, 261, 265, 289

U

Universities 58, 60, 82, 113, 308

Up-front Analysis 305, 316, 329

V

VCI 1-7, 10, 12-14, 16-20, 24

Vendor 87, 133, 140, 193

Video Bridge 130, 140

Volkswagen Group of America 1-2

VW Credit 1-2

W

Wireless Presentation 126, 129, 140