ABSTRACT

Title of Dissertation: REFORM-ORIENTED COLLABORATIVE INQUIRY AS

A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE

SCHOOL

Jessica DeMink-Carthew, Doctor of Philosophy, 2015

Dissertation directed by: Dr. Linda Valli

Professor

Department of Teaching and Learning, Policy and Leadership

Specialized middle level teacher education programs are purported to be a potential lever for middle level education reform. Preparing teachers to enact reformoriented visions of teaching, in the context of uneven, if not stalled, middle level education reform presents a formidable challenge as student teachers attempt to challenge the status quo. Yet, despite a growing body of literature on specialized middle level teacher education, the critical student teaching year remains under-researched. This dissertation thus proposes and investigates Reform-Oriented Collaborative Inquiry (ROCI) as a pedagogy for supporting reform-oriented student teaching in middle school.

Employing a nested design, this dissertation uses two qualitative studies to explore ROCI from a variety of perspectives. The first study describes how four student teachers and one teacher educator used ROCI to create a student-driven social action project that was reform-oriented and responsive to their field placement school. An analysis of middle school student feedback regarding the social action project is also provided. The second study investigates the challenges and benefits experienced by the group as they attempted to innovate using ROCI as well as the insights they developed regarding what it takes to participate in middle level education reform. The challenges

discussed include a disconnect between College of Education and field placement visions of teaching, being "just an intern," cultivating student engagement in "new" teaching approaches, time, and collaboration. The benefits of participation in ROCI include its successful support of reform-oriented innovation, increased understanding and confidence in reform-oriented teaching practices, relationships with students, and new insights for the teacher educator. Student teacher insights indicate that participating in middle level education reform requires collaboration with multiple stakeholders, strategic communication, flexibility and patience.

Findings point to several implications for teacher education. These include the development of teacher education curricula that prepare preservice teachers for reformoriented student teaching as well as the potential for ROCI to serve as a framework for building capacity in reform-oriented teaching in partnership schools as well as through induction. The challenges faced also underscore the need to address the multiple political, structural, and financial challenges that make investing in school-university partnership work difficult.

REFORM-ORIENTED COLLABORATIVE INQUIRY AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

By

Jessica DeMink-Carthew

Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park in partial fulfillment of the requirements for the degree of Doctor of Philosophy

2015

Advisory Committee:

Dr. Linda Valli, Chair

Dr. Tara Brown

Dr. Melissa Landa

Dr. Dan Levin

Dr. Joseph McCaleb

Dr. Kathy Wentzel

© Copyright by Jessica DeMink-Carthew 2015 For Jeremy, my evergreen âme soeur

ACKNOWLEDGEMENTS

I am blessed to have traveled through this Ph.D. journey with so many amazing people at my side. This process has been by far the most intellectually challenging experience of my life yet because of the support and kindness of so many, I have learned, grown, and laughed in ways I had never imagined possible.

Thank you to the many talented faculty members I have had the honor of working with at the University of Maryland, especially my advisor, Dr. Linda Valli, who has offered me the perfect mix of support and challenge throughout this process. I would also like to especially thank my committee members for generously sharing of their time and expertise with me along the way: Dr. Tara Brown, Dr. Melissa Landa, Dr. Dan Levin, Dr. Joseph McCaleb, and Dr. Kathy Wentzel. Special thanks to Dr. Landa for being a true friend and colleague from the very beginning and to Dr. McCaleb for reminding me to chase after the "firebird". Thank you also to the amazing community of graduate students at the College of Education, who have inspired me, stretched my thinking, and helped me keep my sense of humor. Special thanks to Kristin Hamilton for being my "mommy friend" and a steady lifeline through this process full circle.

Thank you to my husband, Jeremy, for inspiring me with your teaching, believing in me when I doubted, and bringing snacks to the "bat cave" when I was just about to lose it. Without you, this absolutely would not have been possible. Thank you also to Siena, my Keala girl, for understanding when Mommy had to work and giving me all the hugs, kisses, and giggles I needed to make it through.

Thank you to my parents, Annick and Max, and brother, Paul, for believing in me and raising me to believe in myself. Thank you for always being willing to help, listen,

and offer advice. To live with the knowledge that you are on my side is an immeasurable gift.

Thank you to the fantastic community of University Park and the amazing neighbors who have been our "village" when we needed it most. Special thanks to Maria Thigpen for her friendship and generosity in hosting countless emergency play dates.

Thank you to Anissa Sunday and Efren Flores for reminding me to balance the work with music and laughter. Thanks is also due to Pj Fiore, the U.P. "flash mob" workout group, and my many running buddies for helping me keep the momentum to write, write, write.

Thank you to all of the inspiring teachers I have been blessed to learn from and work with throughout my life, especially the four remarkable student teachers who were willing to go on this dissertation journey with me. Your commitment, honesty, and courage have given me strength and resolve to last a lifetime.

And lastly, I am grateful to the middle school students I have been blessed to work with and learn from throughout my career as well as this study. The world is unfinished, but you are the future, and I have tremendous hope.

TABLE OF CONTENTS

THEEL OF CONTENTS	
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	X
LIST OF FIGURES	xi
CHAPTER 1: INTRODUCTION AND STATEMENT OF PURPOSE	1
The Origins of the Idea	5
A Study: Learning to Teach in the Midst of Middle Level Education	8
Reform	
The Purpose of this Research	9
Brief Overview of the Study	10
CHAPTER 2: REVIEW OF LITERATURE	13
Perennial Challenges in Teacher Education	13
The Creation of Hybrid Spaces in Teacher Education	16
Innovations in Middle Level Teacher Education	17
Collaborative Inquiry and Education Reform	21
Service Learning and Youth Social Action	24
Service Learning	24
Youth Social Action	26
Why Youth Social Action and Service Learning in Middle School?	28
Students and teachers are engaged in active, purposeful learning.	30
Curriculum is challenging, exploratory, integrative, and relevant.	31
Middle School Environment	32
Researcher Assumptions	35
Conceptual Framework	37
CHAPTER 3: METHODOLOGY	42
Reform-Oriented Collaborative Inquiry (ROCI)	42
The Phases of ROCI	45
Phase 1	47
Form and norm	47
Set reform-minded goals	47
Phase 2	47
Innovate	48
Adjust responsively	48
Maintain reform-oriented focus	49
Make meaning	49
Phase 3	49
Make meaning	49
Share	50

Participants	50
Participant Selection	50
Description of Participants	53
Classroom Assignments	53
Context	55
Middle Level Teacher Education Program	55
Lakeview Middle School (LMS)	57
Professional Development School (PDS) Relationship	58
Nested Research Design	60
Study 1	61
Research questions	61
Data collection	62
Inquiry group audiotapes and memos	62
Group-created teaching materials	62
Student work samples	63
Student feedback	64
Student teacher observation memos	64
Data analysis	65
Research question #1	65
Research question #2	66
Study 2	68
Research questions	68
Data collection	68
Researcher memos	69
Student teacher interview data	69
Student teacher reflections	70
Final inquiry group meeting discussion	70
Data analysis	71
Research questions #1 and #2	71
Research questions #3 and #4	73
CHAPTER 4: ROCI IN PRACTICE AND STUDENT FEEDBACK	76
Reform-Oriented Collaborative Inquiry in Practice	76
Evolution of the ROCI Model	77
Illustrative Example of Reform-Oriented Collaborative Inquiry	78
A note regarding entry	79
Phase 1	80
Form and norm	80
Make meaning	81
Set reform-minded goals	82
Phase 2	86
Part 1: Developing the innovation	86
Fleshing out the innovation and seeking input	87
Planning for the implementation of the innovation	95

Part 2: Implementing the innovation	97
Investigating the essential question	98
Developing proposals, planning and/or taking action	105
Teacher Appreciation Week	109
Community Day	110
Student leadership and positive reinforcement	110
Reflecting and celebrating	112
Summary	113
How did we "innovate"?	113
How did we "adjust responsively"?	113
How did we "maintain a reform-oriented focus"?	114
How did we "make meaning"?	115
Phase 3	116
Make meaning	116
Share	117
The Student Feedback	118
"Fun" Parts	118
"Boring" Parts	121
Feedback on Identified Goals	123
Student voice	123
Importance or "relevance"	125
Making a difference	127
Lessons to Remember	128
Conclusion	129
CHAPTER 5: CHALLENGES EXPERIENCED IN ROCI	132
Disconnect Between College of Education and Field Placement Visions Of Teaching	133
Limited School Implementation and Understanding of AMLE	134
Characteristics	
Perceived Resistance to "New" Ideas	138
Being "Just an Intern"	145
Variation in Mentor Teacher Expectations	145
Mixed Messages About What It Means To Be "Just an Intern"	148
Cultivating Student Engagement in "New" Teaching Approaches	153
Convincing Students That Their Voices Were Important	153
Facilitating a Student-Centered Learning Environment	155
Time	160
Interruptions and Compromised Timelines	160
Juggling This Work With Other Obligations	162
Collaboration	163
Communication Within Our Group	163
Within-Group Differences	165
Conclusion	168

CHAPTER 6: BENEFITS EXPERIENCED IN ROCI	170
ROCI Supported the Group in Reform-Oriented Innovation	170
ROCI Was En-"Courage"ing	171
ROCI Reminded Us of Our Reform-Oriented Commitments	174
Increased Understanding and Confidence in Reform-Oriented Teaching	182
Learning How to Actually DO This	182
Developing Habits of Mind	191
Relationships With Students	195
New Insights for the Teacher Educator	198
Working in the Theory/Practice Space	198
Communicating With Student Teachers	200
Relinquishing Control	203
Conclusion	204
CHAPTER 7: STUDENT TEACHER INSIGHTS INTO WHAT IT TAKES TO PARTICIPATE IN MIDDLE LEVEL	206
EDUCATION REFORM	
Collaboration with Multiple Stakeholders	207
With Other Teachers	207
With Administration	210
With Students	215
Strategic Communication	217
Flexibility and Patience	225
Conclusion	226
CHAPTER 8: CONCLUSIONS AND IMPLICATIONS	228
Contribution of this Study	228
Description of Reform-Oriented Collaborative Inquiry in Practice	228
Description of the Resulting Reform-Oriented Innovation	229
Middle School Student Feedback Regarding Their Perception of the Project	229
Description of Challenges and Benefits Experienced by the Student Teachers and Teacher Educator Engaged in ROCI	230
Student Teacher Insights Regarding What It Takes to Participate in Middle Level Education Reform as a Teacher	230
Revisiting the Conceptual Framework	231
Limitations of this Study	236
Implications for Teacher Education and Professional Development	240
Teacher Education Curricula that Prepares Student Teachers for Reform- Oriented Student Teaching	240
ROCI as a Framework for Building Capacity in Reform-Oriented Teaching	245

The need for political, structural, and financial support of school-university partnerships	245
ROCI as collaborative professional development with partnership schools	248
ROCI as reform-oriented support for mentor and student teachers	251
Phase 1	254
Phase 2	254
Phase 3	255
ROCI as induction support for new College of Education graduates	256
Implications for Future Research	258
Conclusion	260
APPENDICES	262
Appendix A: 16 Characteristics of Successful Schools for Young Adolescents	262
Appendix B: This We Believe Executive Summary	263
Appendix C: AERA Proposal 2013	264
Appendix D: Example Collaborative Inquiry Cycle #1	269
Appendix E: Example Collaborative Inquiry Cycle #2	270
Appendix F: Example Collaborative Inquiry Cycle #3	271
Appendix G: Middle School Student Final Reflection Prompts	272
Appendix H: Student Teacher Interview Protocol	273
Appendix I: Excerpt from Coded Memo and Transcribed Segments	275
Appendix J: Excerpt from a Data Display for "Benefits: Learning how to actually <i>do</i> this"	276
Appendix K: Student Teacher Reflection Prompts	277
Appendix L: Excerpt from Group-created Plan for the Investigation Phase of the Social Action Project	278
Appendix M: S.O.U.L. Proposal	279
•	
REFERENCES	281

List of Tables

Table	Page
3.1: Phases of ROCI and Associated Activities	46
3.2: Research Questions and Data Sources	63
3.3: Categories of Feedback and Corresponding Data Sources	67
4.1: Student Data Excerpted from 2013 School Climate Survey	89
4.2: Excerpt from Project Map	93
4.3: "Dream List" of Student Ideas for Promoting Positive School Culture	102
4.4: Summary of Student Feedback Regarding Identified Goals	123

List of Figures

Figure	Page
1.1: Nested Design for Research	11
2.1: A Map of a Service Learning Process Adapted from the IPARDC Process	26
2.2: Student Teacher Perspectives Regarding Middle Level Education Reform Prior to Student Teaching	38
2.3: Student Teacher Perspectives Regarding Middle Level Education Reform During Student Teaching	39
2.4: Student Teacher Perspectives Regarding Middle Level Education Reform During Student Teaching with ROCI	40
3.1: Reform-Oriented Collaborative Inquiry (ROCI)	43
3.2: Map of Data Sources Included in Each Study Within the Nested Design	61
4.1: Original Proposed Model for Collaborative Inquiry	77
4.2: Loose Overview of IPARDC to Share	92
4.3: Spirit Week Flyer for Teachers	106
4.4: Student-Created Posters to Advertise for Spirit Week	107
8.1: Student Teacher and Teacher Educator Perspectives Prior to Student Teaching	232
8.2: Student Teacher and Teacher Educator Perspectives After Student Teaching without ROCI	234
8.3: Student Teacher and Teacher Educator Perspectives After Student Teaching with ROCI	235

CHAPTER ONE

INTRODUCTION AND STATEMENT OF PURPOSE

As many Colleges of Education nationwide and internationally step into the relatively new venture of specialized middle level teacher preparation programs, middle level teacher educators, student teachers, in-service teachers, schools, students, families, and communities stand to benefit from the focused efforts of so many committed to the particular nature of teaching and learning at the middle level. Indeed, the emergence of specialized middle level teacher education programs is purported to be a potential lever for middle level education reform (Association for Middle Level Education, 2006).

Preparing teachers in the context of uneven, if not stalled, middle level reform (Dickinson & Butler, 2001; McEwin, Dickinson, & Jenkins, 2003), however, presents a formidable challenge.

Calls for middle level education reform have a 60 year history built upon decades of research in middle level best practices (Arth, Johnston, Lounsbury, Toepfer Jr, & Melton, 1985; Association for Middle Level Education, 2010, 2010, 2013; Erb, 2001; Jackson & Davis, 2000; National Middle School Association, 2003). The middle school movement originated from mounting criticisms in the 1950s and 1960s that junior high schools had developed into nothing more than "a junior version of the high school" (Beane, 1991, p. 10) and, as such, were inappropriate for the developmental needs of early adolescents (Alexander & Williams, 1965). Although the creation of the junior high had also been motivated in part by a felt need for a school tailored to early adolescence, the "persistent problems of the junior high" were, summarily:

1) departmentalization (students move from class to class, subjects taught by different teachers, etc.); 2) curriculum is subject centered (academic subjects still emphasized); 3) teachers are inadequately trained for junior high school (most received their formal education in subject matter rather than knowledge of student development; few discharge their role of guiding teenagers); 4) teaching is similar to what occurs in high schools (dominated by textbooks, teacher-controlled lessons, and class periods of 40-50 minutes); 5) students are organized into groups that take subjects together (i.e., tracking); and 6) students exploring their interests are limited to home economics, shops, and extracurricular activities. (Douglass, 1945 as cited in Cuban, 1992, p. 238)

The middle school movement was thus motivated in part by the failure of the junior high school movement to fundamentally change learning environments for early adolescents (Coxe, 1930; Lounsbury & Douglass, 1965). The pervasive rethinking of institutions and society that characterized the progressive times of the 1960s also provided fertile ground for the middle school movement (Smith & McEwin, 2011).

The eventual publication of the seminal report, *Turning Points: Preparing*American Youth for the 21st Century (Carnegie Council, 1989), presented the first comprehensive vision of the key structures, principles, and practices needed for developmentally-appropriate middle schools. From this vision, the crux of the middle level education reform was born: the middle school concept (See Appendices A and B).

Driven by clearly articulated goals for middle level education that emphasize citizenship, critical thinking, self-actualization, and 21st century skills, the middle school concept consists of an interdependent list of four key attributes and sixteen characteristics of

successful schools for young adolescents (Association for Middle Level Education, 2010) (See Appendix B). With deep roots in democratic education and integrated curriculum (Beane, 1993, 2005; Dickinson & Butler, 2001; Stowell, McDaniel, & Rios, 1995), the middle school concept presents a distinctive curriculum that is a "total ecology of schooling" (Dickinson & Butler, 2001, p. 10), including features such as instructional teaming, advisory programs, exploratory electives, interdisciplinary units of instruction, service learning, project-based learning, and cooperative learning.

Recent empirical research continues to support the model of the middle school concept. A groundbreaking study by McEwin & Greene (2010), for example, has shown that highly successful middle schools (as defined by rigorous criteria for national recognition that includes but is not limited to a successful record of improving standardized test scores) "more highly implemented the components of middle level schools as recommended in the middle school literature" (p. 58) than a comparison random sample. These findings indicate an association between authentic implementation of the middle school concept and a host of positive outcomes for middle school learners. Although much progress has been made in restructuring middle schools, however, research has also shown that more than 60 years after the origins of the middle school movement, the characteristics associated with the developmentally-appropriate middle school concept remain inconsistently implemented in middle schools in the United States (Bradley, Manzo, & Week, 2000; Irvin & Valentine, 1994; McEwin et al., 2003; McEwin & Greene, 2010; Wiles & Bondi, 2001). Moreover, similar to the criticisms of the preceding junior high movement, "very little has changed at the core of most students"

school experience: curriculum, assessment, and instruction" (Davis & Jackson, 2000, p. 5).

A lack of specialized middle level teacher preparation programs has plagued the progress of the middle school movement since those teachers who end up in middle school are often "unschooled in appropriate curriculum and instruction for young adolescents, and ignorant of the place and purpose of middle school organizational practices and the complex role of the middle school teacher" (Dickinson & Butler, 2001, p. 7). Specialized middle level teacher education programs are thus pivotal in the continued pursuit of developmentally-appropriate middle grades education. A new round of professional standards published by the Association for Middle Level Education (AMLE; 2013) as well as professional development materials like the *This We Believe* series (AMLE, 2012; National Middle School Association, 2010) are rooted in the reform-oriented vision of the middle school concept. Consequently, specialized middle level teacher education programs are designed to promote reform-oriented visions of middle level teaching. The work of preparing reform-oriented teachers in the context of uneven middle level education reform, however, presents a formidable challenge. Since the full implementation of the middle school concept remains a vision rather than a reality, middle level teacher educators must address the competing demands of preparing student teachers to enact the reform-oriented vision while still preparing them for the current status of teaching in middle school field placements. Much like middle level students who hover between childhood and adolescence, however, the work of middle level teacher educators calls us to float between two realities---1) the reality we hope to create by preparing our teacher candidates with a rich foundation in middle school

philosophy and 2) the reality of our field placement settings which vary widely in their adherence to middle school philosophy. In light of perennial challenges in teacher education associated with teacher socialization (Allen, 2006; Schempp & Graber, 1992; Zeichner, 1985; Zeichner & Tabachnick, 1981a) and the transfer of theory to practice (Korthagen, 2011; Zeichner, 2010), careful thought must be given to how middle level teacher educators can prepare student teachers to navigate the tension between the reform-oriented middle school concept and the current realities of practice.

The Origins of the Idea

In an effort to make the problem facing middle level teacher education concrete for the reader, I offer the following illustration of how my experiences with this challenge led to the development of this research.

I recently had the opportunity to simultaneously teach a newly offered specialized middle level education course and supervise student teachers who had been placed in middle schools. My experiences as a middle school teacher have made me a long-time proponent of and believer in the middle school concept. As such, when I was given the opportunity to design an introductory middle level education course, I did not hesitate to put the middle school concept front and center. The syllabus I developed was unabashedly bent on developing a rich appreciation for the Association for Middle Level Education (AMLE) vision of middle level education.

In my role as a university supervisor for other students closer to teacher candidacy, however, disturbing questions began to arise about the utility of the coursework I had painstakingly aligned to the AMLE vision. On Mondays and Wednesdays I explored the AMLE vision of middle level education reform in my classroom with one set of students,

but on Tuesdays and Thursdays I struggled, in student teacher field placements, to identify any traces of this vision I had been so immersed in the day before. Where were the interdisciplinary units of instruction? Why weren't these teachers teaming? When did advisory sessions become remediation? Where were the relevance, the active learning, the meaningful choices? Why did teachers look at me strangely when I asked about projects? Indeed, were it not for the gangly limbs, teen heartthrob folders, and occasional pint-sized late bloomer, there was nothing to distinguish this middle school from a high school.

Back in my university classroom, I was also becoming increasingly aware of the challenge my students and I faced in "seeing" what the AMLE middle school concept looked like in action. Given that their own middle school learning and field experiences were not in keeping with this model, they craved concrete examples and routinely pushed back when the resources we explored failed to fulfill this need. I attempted to address this concern by modeling some of the most unfamiliar characteristics in class (ex. engaging them in active learning, providing multiple varied assessments, etc.) and drawing on examples provided by AMLE, yet I continued to hear the same refrain---*Yeah*, but what does it look like in the classroom? In math? In science? With real kids? At this school? These students appeared committed to middle level education reform and were excited by the idea of the middle level concept. Yet their concerns underscored compelling questions regarding the transfer of reform-minded vision to practice: How can I learn to do what I cannot see? How am I supposed to do this when I start working in a school where this isn't in place?

And so went the semester. On Mondays and Wednesdays I was heartened by my students' growing conviction in the reform-oriented middle school concept yet increasingly aware that we were grasping at something we could not see. And on Tuesdays and Thursdays I was in real middle school classrooms, disheartened by the tidal wave of worksheets and lectures and silence that was threatening to swallow up the students, teachers, student teachers, and my faith in the AMLE reform-minded vision. Why? Was the AMLE vision flawed? Undesirable? Undoable? Was I selling a fantasy? The AMLE resources suggested otherwise, detailing the innovative work being done at exemplary middle schools across the country, yet these written accounts did little to satisfy my urge to see.

As the semester came to a close, the usual nostalgia of another class ending was punctuated by fear. What would happen to my students when they, like their counterparts, entered student teaching? Having built so much momentum around middle level education reform, I worried what would happen once these students entered student teaching. They were an amazing group of committed middle level student teachers and I was moved by their passion. But what is passion in the face of the traditional? A small group of prospective student teachers began to linger after class, asking questions and sharing their fears about what would happen in student teaching at their assigned school. Their end-of-semester reflections echoed my own concerns: What happens if this isn't happening in the school where I teach? How can I create change in my school? Again, my reform-minded commitments chafed against my pragmatic sensibilities as I worried that I had failed these students by focusing on a vision rather than the reality of what they would face in the field. My happy Monday/Wednesday club was about to collide with the

hard truth of Tuesday/Thursday, an impact for which I knew I had inadequately prepared them

I could see clearly now the double-edged sword upon which middle level teacher education teeters---commit too entirely to a reform-minded vision and you risk being unrealistic; commit too pragmatically to preparing students for the status quo and you risk being subsumed by the traditional. While I had been busy struggling to make sense of the tension between the AMLE vision and the reality of our middle school field placements, I had failed to engage my students in this struggle. In an effort to protect them from the messiness, I had failed to prepare them for an essential part of the work of teachers committed to education reform: to look at the spaces in between what is and what should be to envision and enact what could be.

A Study: Learning to Teach in the Midst of Middle Level Education Reform

Driven by this experience and curious to learn more about the perspectives of reform-minded student teachers embarking on student teaching, I organized a summer series of three focus group sessions to explore the following research questions:

- 1. What are the felt needs of student teachers committed to middle level education reform as they anticipate "teaching against the grain" (Cochran-Smith, 1991, p. 279) in student teaching?
- 2. What ideas do preservice teachers committed to middle level education reform have for how middle level teacher education programs could support them in teaching against the grain in student teaching?

Three student teachers were invited to participate in the focus group on the basis that they 1) were about to enter their student teaching year, 2) had expressed a clear

interest in middle level education reform as evidenced by class discussions and reflections, and 3) had raised important questions concerning their impending student teaching experience in the context of middle level education reform. An AERA proposal with a detailed description of the data collection and analysis methods as well as the findings from this study is provided in Appendix C. In brief, however, the focus groups revealed that student teachers committed to middle level education reform crave relational support, structural support, and permission to take risks without fear of failure in student teaching. Building from these themes, the student teachers had no shortage of ideas to share concerning how middle level teacher education programs could support them in student teaching. Taken together, these ideas offer a vision for student teaching that is centered in structured collaboration around a wisely selected goal. These findings, paired with my experiences as a university supervisor and middle level teacher educator, are the inspiration for the research discussed in this dissertation.

The Purpose of this Research

This research is driven by two overarching questions:

- 1. How can middle level teacher education contribute to middle level education reform?
- 2. How can we support middle level student teachers in innovating in a responsive and reform-minded way during student teaching?

To this end, in this dissertation, I propose and investigate an original collaborative inquiry model, Reform-Oriented Collaborative Inquiry (ROCI), as a pedagogy for supporting middle level student teachers in "innovating" in student teaching. Innovation used here refers to the creation or addition of a new approach to teaching and learning in

a given field placement school or classroom. Although an innovation may be new to a given classroom, it will necessarily be informed by middle school best practices literature and, in building on the work of others, is not expected to be unprecedented. However, since the innovation is new to the field placement classroom, it must also be responsively developed to suit the unique context in which it is implemented. In this way, the implementation of "new" approaches to teaching and learning will be original, and thus innovative.

Given Cochran-Smith's (1991a) influential work on learning to teach against the grain, the subtle difference between the language of *innovation* and *teaching against the grain* is worth mentioning. While innovation involves the creation of something new, it does not suggest that what exists is necessarily bad. Indeed, innovation often builds on the foundation of existing work. In contrast, to prepare student teachers to *teach against the grain* carries an oppositional connotation, as though the grain is bad and going against it is good. Sometimes the grain goes in a certain direction for an enlightened reason. As such, the language of innovation used by Deering et al. (2003) deconstructs the dichotomy between education reform as "good" and the current state of education as "bad." Instead, innovation builds upon the rich and valuable knowledge base of both theory and the local school. In this way, innovation can serve as a non-oppositional means to participate in small-scale middle level education reform at the local level.

Brief Overview of the Study

To investigate multiple aspects of the Reform-Oriented Collaborative Inquiry (ROCI), I used a nested research design (Figure 1.1) to organize two separate yet connected studies.



Figure 1.1. Map of Nested Design for Research

In Study 1, I engaged in the collaborative inquiry cycle with four reform-minded student teachers with whom I had previously worked. Through ROCI, the group innovatively engaged their middle school students in a student-driven social action project guided by the following essential question: *How can we promote a positive school culture in Lakeview Middle School*¹? In keeping with the participatory nature of collaborative inquiry, we co-developed a focus for our investigation. For the purpose of this study, however, the following research questions were used to document and describe the group's engagement in ROCI as well as the resulting innovation:

- 1. How did we as a group innovate to put AMLE characteristics (See Appendix A) into practice in a way that is responsive to the needs and strengths of our middle school community?
- 2. What does middle school student feedback indicate about their experience with our innovation?

_

¹ Pseudonym for the field placement school.

In Study 2, I employed qualitative inquiry to examine the group's experiences and perspectives as we engaged in ROCI. The following research questions were used to examine these perspectives:

- 1. What challenges, if any, did our group face throughout ROCI?
- What benefits, if any, did our group experience through participation in ROCI?
- 3. What strategies, if any, did the group develop to cope with the challenges they faced throughout ROCI?
- 4. What, if anything, did student teachers learn about what it takes to participate in middle level education reform?

As will be made clear in the literature review that follows, there is a growing body of literature on specialized middle level teacher education. The critical student teaching year, however, remains an under-researched aspect of the middle level teacher learning trajectory. Research that explicitly situates student teaching within the context of middle level education reform is non-existent. This research thus addresses this gap in the literature by investigating Reform-Oriented Collaborative Inquiry as a pedagogy for supporting reform-oriented student teaching in the context of middle level education reform.

CHAPTER TWO: REVIEW OF LITERATURE

In this chapter I begin by reviewing literature pertaining to perennial challenges in teacher education as well as innovations that have been developed to address these challenges. Special attention is given to the emerging body of literature on middle level teacher education. I subsequently review literature on two pedagogies that greatly informed the work of our collaborative inquiry group---youth social action and service learning---and introduce the AMLE recommendations for a developmentally-appropriate middle school environment. I end by discussing my researcher assumptions and introducing my conceptual framework.

Perennial Challenges in Teacher Education

Since specialized middle level teacher education programs are driven by reformoriented professional standards tied to the middle school concept, student teachers
enrolled in these programs are arguably positioned to bring reform-oriented ideas to the
field. Research into teacher socialization provides compelling evidence, however, that
numerous challenges make innovation in teaching difficult. Traditional models in the K16 education continuum pose a significant challenge for those committed to changing
teaching practices (Allen, 2006; Schempp & Graber, 1992; Zeichner & Tabachnick,
1981a; Zeichner, 1985). Student teachers often enter university after twelve years of
"apprenticeship of observation" in the traditional model as students in the K-12 education
system (Lortie, 1975). Likewise, "studentship" experiences in teacher education often
perpetuate traditional conceptions of teaching and learning through a dependence on
teacher-centered pedagogies (Graber, 1991). Even as teacher educators develop
pedagogies to teach and model reform-oriented practices in coursework, field placements

are likely to reinforce traditional approaches (Bradley, Manzo, & Week, 2000; Dickinson & Butler, 2001; Irvin, Valentine & Clark, 1994; McEwin & Greene, 2010; Wiles & Bondi, 2001). The disappointing result of all of these challenges has been associated with what Zeichner and Tabachnick (1981) named a "washing out" of the effects of teacher education once students enter student teaching and induction. This "washing out" makes the participation of teacher education in education reform problematic and, at worse, limited.

The potential for teacher education to contribute to reform efforts is also made difficult by the persistence of the "application-of-theory-model" (Korthagen & Kessels, 1999) of teacher education, which operates from the assumption that prospective teachers must first learn theory and then apply this theory in practice. The leap from theory to practice, however, is a formidable one complicated by all of the challenges described above. In addition, however, the application-of-theory-model is tied to another widely documented conflict between academic knowledge and practitioner knowledge (Zeichner, 2010). While Colleges of Education predominantly espouse the importance of deep theoretical and foundational knowledge to undergird practice (academic knowledge), the demands of the field require a developed proficiency in teaching practices that address all of the pragmatic elements of teaching in all of its complexity (practitioner knowledge). Although these two perspectives could work symbiotically towards the same goal of accomplished teaching, productive dialogue between practitioners and academics is hampered by a historically hierarchical relationship in which academic knowledge is given priority over practitioner knowledge (Martin, Snow, & Franklin Torrez, 2011; Zeichner, 2009, 2010). Zeichner (2009) writes, for example, that despite the promotion of

models such as school-university partnerships and professional-development schools, "colleges and universities continue to maintain hegemony over the construction and dissemination of knowledge for teaching in teacher education" (p. 488). This inequitable distribution of decision-making power subjugates the expertise of practitioners, thus making meaningful collaboration between academics and practitioners around theory/practice and teaching/learning difficult. Since education reform relies on practitioner implementation, the success of this reform hinges on precisely the form of collaboration that is precluded by the hierarchical nature of the "application-of-theory-model" of teacher education (Korthagen, 2011, p. 34). Thus, with one foot in the academic world and the other in that of the practitioner, student teachers committed to education reform are often left to navigate the thorniness of transferring theory to practice alone.

Reform-minded student teachers also face the challenge of the pervasive apprenticeship model of student teaching, which emphasizes their position as novices to the "doing" of teaching and can facilitate the dismissal of their ideas as idealistic or naive by mentor teachers and student teachers themselves (Cochran-Smith, 1991b). In the absence of scaffolded collaboration between mentor and student teachers around reform-oriented teaching, the traditional student teaching experience remains one in which student teachers are expected to learn the "real business" of teaching from their mentor teachers. As such, the student-mentor relationship can indeed be symptomatic of the theory-practice divide and student teachers can experience this divide as a "pushing and pulling" (p. 345) between socialization forces and individual inclinations (Schempp and Graber, 1992). If not attended to, the dissonance experienced when attempting to teach in

ways that innovate can result in teacher candidates concluding that reform-minded teaching is too impractical or simply impossible. A failure to address the push and pull of the student teaching experience can thus perpetuate the status quo.

The Creation of Hybrid Spaces in Teacher Education

Much has been written to underscore the importance of dynamic school-university partnerships in the work of teacher education (Boyle-Baise & McIntyre, 2008; Clark, 1999; Darling-Hammond, 2000; Zeichner, 2006, 2010). Yet, despite great strides being taken to carefully develop professional development school partnerships and illustrate the importance of school-university partnerships in teacher education (Boyle-Baise & McIntyre, 2008; Clark, 1999; Darling-Hammond, 2005; 2006; National Council for Accreditation of Teacher Education, 2014), "the disconnect between what students are taught in campus courses and their opportunities for learning to enact these practices in their school placements is often very great even within professional development and partner schools" (Zeichner, 2010, p. 483). Drawing on hybridity theory and third space (Bhabha, 1990), Zeichner (2010) proposes that teacher educator programs must design creative "hybrid spaces" or "boundary crossings" in teacher education. These "boundary crossings" aim to bring "academic and practitioner knowledge together in a more synergistic way in support of student teacher learning" (p. 487). The following examples are offered: 1) bringing P-12 teachers and their knowledge into campus courses and field experiences, 2) incorporating representations of teachers practices in campus courses, 3) mediated instruction and field experiences, 4) hybrid teacher educators, and 5) incorporating knowledge from communities into preservice teacher education.

Zeichner (2010) describes hybrid teacher educators as "clinical faculty positions where the work of teacher educators takes place both in elementary and secondary schools and on a college and university campus" (p. 490). Although the precise responsibilities associated with these positions vary, they consist of a blend of school-university partnership and teacher preparation work. While Zeichner suggests that the work of hybrid teacher educators could create more dialectic third spaces in teacher education and subsequently reduce the disconnect between schools and universities, he does not offer any concrete guidance as to how this might be accomplished. Reform-Oriented Collaborative Inquiry (ROCI) is thus proposed herein as a pedagogy through which "hybrid teacher educators" could support teacher candidates in reform-oriented student teaching.

Innovations in Middle Level Teacher Education

Although middle level teacher education is a newly emerging field of research, recent inquiries into program design and student teacher experiences are beginning to shed some light on which elements of middle level teacher preparation programs are particularly effective. A review of this literature reveals that middle level student teachers benefit from: 1) meaningful school-based field experiences that make clear links between middle level theory and teaching practice and 2) the modeling of the middle level concept in teacher education courses (Deering, Zuercher, & Apisa, 2010; de Jong & Chadbourne, 2007; Ference & McDowell, 2005; Kleine & McBryar, 2009; McDaniel & Stowell, 1994; Stowell et al., 1995).

A central challenge in designing the first of these elements in middle level teacher education stems from the aforementioned tension between reform-oriented practices

espoused by coursework and traditional models likely to be pervasive in the field. Making explicit links between theory and practices that are evident in field experiences seems logical and indeed do-able. As has been recognized by Zeichner (2010), making these connections becomes more challenging, however, if we aim to propagate reformminded visions of "what could be." If we are not careful, the well-meaning desire to make meaningful links between theory and practice, coursework and field experience, can result in teacher education being driven by "what is" rather than "what could be," subsequently running the risk of perpetuating the status quo. Teacher educators must consider, therefore, how we can facilitate meaningful links between reform-minded theory and practice in ways that honor both.

The second of these elements is the modeling of the middle level concept in teacher education courses. In the absence of field experiences that have successfully implemented the middle school concept, this approach strives to address the dissonance between coursework and fieldwork by simulating the middle school concept in the teacher education program itself. Exemplary middle level teacher education programs thus provide a context in which teacher candidates can learn about the middle school concept while experiencing the developmentally-appropriate vision themselves (de John & Chadbourne, 2007; Deering, Zuercher, and Apisa, 2010; Kleine & McBryar, 2009; Stowell, McDaniel & Rios, 1995). Program structures, for example, may support teacher educators in teaming to develop interdisciplinary thematic units of instructional curricula that are relevant and responsive to the lives of the teacher candidates. Throughout these units of instruction, they may provide opportunities for the teacher candidates to make meaningful choices and provide feedback that subsequently informs instruction and

assessment design. Teacher candidates in such programs, likewise, may be expected to collaborate with peers to explore new concepts and propose authentic means to demonstrate what they have learned (Deering et al., 2010; de Jong & Chadbourne, 2007; Ference & McDowell, 2005; Hagenauer & Hascher, 2010; Hansen, 2010; Kleine & McBryar, 2009; Marchand, 2008; Stowell et al., 1995).

This pedagogic modeling is a purposeful move to address the problematic nature of traditional views of teacher and student roles in the field and in teacher education, especially given the decidedly learner-centered nature of the middle school concept. Building on the tradition of Deweyian progressive education philosophy, the middle school concept represents a radical departure from traditional schooling by emphasizing the democratic and emancipatory purposes of schooling (Beane, 2005; Dewey, 1916/1963; Stowell et al., 1995). While many students may agree with this vision, few will have experienced it. Learner-centered teaching practices such as "active learning" and "relevant curriculum" advocated by AMLE are rooted in a strong research base elucidating the benefits of such approaches to teaching (Bransford, Brown, & Cocking, 2000; National Middle School Association, 2010). Nonetheless, middle grades classrooms remain decidedly teacher-centered and offer fewer opportunities for meaningful decision-making than the elementary schools that precede them (Dickinson & Butler, 2001; Hagenauer & Hascher, 2010; Hansen, 2010; Marchand, 2008; McEwin et al., 2003; McEwin & Greene, 2010; Rotherham & Willingham, 2009). With this in mind, the modeling of reform-minded middle level practices in teacher education courses serves a dual purpose. First, by practicing what they advocate, teacher educators aim to avoid the perils of "studentship" in traditional models that would undermine any effort to

advocate for reform-minded practices. Second, in the absence of reform-minded field experiences, this modeling in the university classroom allows teacher educators to facilitate the theory-practice link within the university classroom, making these connections explicit as they model practices while teaching theory.

Nonetheless, in the absence of the reform-minded middle school concept in the field, questions remain as to how modeling that is confined to the university classroom transfers into actual practice once students enter the field as student teachers.

Experiencing a practice as a student is not the same as knowing how to enact the practice as a teacher. Likewise, having experienced and seen the middle school concept at work in a university setting with college-aged students is not the same as being prepared to implement this concept in a middle school setting. The modeling of reform-oriented practices in a university classroom also does not address the enormity of the challenge student teachers will face in enacting these practices when they step into student teaching in traditional field placements. Indeed, without careful consideration given to the design of field experiences, the modeling of reform-minded practices in teacher education, however well intentioned, could have the undesirable effect of enlarging the gap between theory and practice, rather than lessening it.

This dissonance becomes of particular concern when middle level student teachers enter student teaching. As the culminating experience of a teacher education program, the student teaching year is the point in which student teachers must begin to negotiate the previously described challenges associated with teacher induction.

Surprisingly little has been written, however, about the student teaching year of middle level teacher preparation. A search for published research that explicitly addresses the

critical student teaching phase of specialized middle level teacher education identified only four studies. Two investigate the practice of partnering two student teachers with one mentor in student teaching (Eick, 2002; Gardiner & Robinson, 2010), and the third summarizes the results of a survey investigating common middle level student teacher fears (Brannon, 2010). The fourth study proposes a collaborative and developmental approach for teacher induction into student teaching designed to scaffold the student teacher from observation to whole class teaching (Arhar & Walker, 2002). While each of these studies adds to the knowledge base around student teaching, none of them focuses explicitly on reform-oriented student teaching.

Collaborative Inquiry and Education Reform

Bray, Lee, Smith, and Yorks (2000) define collaborative inquiry as "a process consisting of repeated episodes of reflection and action through which a group of peers strives to answer a question of importance to them" (p. 6). Collaborative inquiry, one of several participatory and action-based inquiry methods, has been identified by researchers as an innovative way to improve practice and construct new knowledge, particularly in education (Bray, Lee, Smith, & Yorks, 2000; Brooks & Watkins, 1994). Collaborative inquiry is designed to "provide a liberating structure within institutional settings for people to explore questions normally closed to them" (Bray et al., 2000. p. 13). For this reason it is particularly well suited to the goal of engaging student teachers in education reform.

Although the commitment to creating a liberating and responsive method precludes the designation of a prescribed model, Bray et al. (2000) nonetheless offer a four-phase map of the collaborative inquiry process (See Appendix D) as a general guide.

Cyclical in nature, the process consists of four primary phases: 1) forming a collaborative group, 2) creating the conditions for group learning, 3) acting on the inquiry question, and 4) making meaning by constructing group knowledge (p. 14). To illustrate variants on the collaborative inquiry cycle, two other examples that have informed the design of the ROCI are also included as Appendices E and F.

Empirical research on collaborative inquiry in teacher education and professional development points to a range of outcomes related to its transformative potential. Namely, collaborative inquiry has been associated with shifts in teaching practice as well as the development of what Cochran-Smith and Lytle (1999) call knowledge-of-practice (Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Butler & Schnellert, 2012; Goodnough, 2010; Hung & Yeh, 2013; Nelson & Slavit, 2008; Zech, Gause-Vega, Bray, Secules, & Goldman, 2000). Since education reform is implemented by teachers, these findings suggest the important role collaborative inquiry could play in education reform. There is also some evidence to suggest that participation in collaborative inquiry can serve as a catalyst for shifts in teacher thinking concerning their role in school change. Huffman and Kalnin (2003), for example, found that participation in collaborative inquiry allowed teachers "to take more ownership over local data and expand their role in their schools' decision-making process" (p. 569). Likewise, research by Zech, Gause-Vega, Bray, Secules, and Goldman (2000) suggests that teachers who engage in collaborative inquiry come to "see themselves as active constructors of their knowledge and discover how to create and sustain collaborative communities of inquiry within which to continue learning together" (p. 16). And lastly, a study by Storms and Gordon (2005) identifies collaborative inquiry as a means to build courage and develop an understanding of "how

to engage others in collaborative conversations" (p. 71). Taken together, these findings are a testament to the instrumental role collaborative inquiry can play in transforming the lives and work of teachers, and by extension, schools.

And finally, as it concerns school-wide change and middle level education reform specifically, the work of Deering, Perez, Wong, Leong, and Yep (2003) speaks to the potential for collaborative inquiry as a model for school-based professional development. The authors present two compelling examples of how a collaborative inquiry process entitled *What's driving you crazy?* (See Appendix F) for school-based professional development resulted in "craziness reduction" (p. 34) in two Hawaii public middle schools. For example, in response to the "craziness of trying to address young adolescents' needs with a traditional junior high school approach. . [especially] the needs of the school's growing lower-income student population and its transient military students" (p. 34), Deering et al. (2003) describe some of the results as follows:

One of the key innovations of Moanalua Middle is its heterogeneous teaming structure, with daily planning meetings of regular and special education faculty dedicated to curriculum, student concerns, and other functions. The flexible block schedule allows teams to regroup students and extend class sessions to support interdisciplinary projects including studies of family ethnicity, investigation of water quality, bridge building, career exploration, and more. Teams also hold their open house nights offering a much more personalized approach than the typical whole-school format; the high turnout for these events helps address the typical craziness of "Parents aren't involved" (p. 35).

This excerpt provides a rich illustration of how collaborative inquiry can result in coordinated school-wide innovation to address the unique needs of the school community. Since the collaborative inquiry cycle is aimed at middle level education reform, this work also speaks to the success of collaborative inquiry as an instrument for engaging inservice teachers in education reform within their local middle school.

Service Learning and Youth Social Action

This section introduces literature on two approaches to teaching and learning that greatly informed the development of the inquiry group's reform-oriented innovation: service learning and youth social action. In this section, I introduce the approaches to service learning and youth social action that informed the collaborative inquiry group's approach. I then describe the relationship between this approach and specific AMLE characteristics as well as well-documented challenges faced by middle schools.

Service Learning

As service learning has emerged as a popular pedagogy in K-12 and higher education settings, research on service learning in schools has led to numerous publications and handbooks (Billig, 2000, 2011; Butin, 2003; Clayton, Bringle, & Hatcher, 2013a, 2013b), many of which emphasize the role this pedagogy can play at the middle level in particular (Pritchard & Whitehead III, 2004; Roberts & Yang, 2002; Theriot, 2009; Totten & Pedersen, 2009). Because the term "service learning" is used to represent a vast continuum of experiences for a wide array of purposes, it is first necessary to clearly define what is meant by "service learning" in this dissertation.

Service learning, as it is referred to here, is in keeping with the following definition from the National Service Learning Clearinghouse (2013):

Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities. Through service-learning, young people—from kindergarteners to college students—use what they learn in the classroom to solve real-life problems. They not only learn the practical applications of their studies, they become actively contributing citizens and community members through the service they perform.

As it pertains to the work developed by the collaborative inquiry group, two aspects of this definition warrant further clarification. The first is simply that while service learning can be used to engage students in community issues that expand beyond the walls of their school, for the purpose of this study, the student teachers and their students chose to focus their project on the investigation and strengthening of their school community.

The second is that while some variations of service learning have been criticized for positioning students as passive participants in a predetermined project, this approach to service learning is committed to the "youth voice" standard for quality service learning practice, which states that high quality service learning "provides youth with a strong voice in planning, implementing, and evaluating service-learning experiences with guidance from adults" (National Youth Leadership Council, 2008). Further description of the role of students in quality service learning provided by the Coalition for Community-Based Learning identifies the following essential elements for student voice:

Students participate actively in choosing and planning the service project;

Students participate actively in planning and implementing the reflection sessions, evaluation, and celebration;

Students participate actively in taking on roles and tasks that are appropriate to their age. (Blank, Berg, & Melaville, 2006, p. 43)

Through active engagement in all stages of the service learning IPARDC process (Investigate, Plan, Act, Reflect, Demonstrate/Celebrate) (See Figure 2.1), students identify and investigate an issue of relevance to them and their community, collaboratively develop a plan for action to address this issue, take action, reflect on the experience, and share what they learned with others. Interdisciplinary content standards are embedded in all stages of the process and are assessed formatively throughout and summatively at the reflection and sharing phase through multiple forms of authentic assessment.



Figure 2.1. A map of a service learning process adapted from the IPARD process (National Youth Leadership Council, 2013)

Youth Social Action

Informed by theoretical underpinnings such as critical pedagogies, democratic education and empowerment education, youth social action aims to empower young people to take action that challenges the status quo. Similar to service learning, many definitions exist for youth social action:

Young people taking practical action in the service of others in order to create positive social change that is of benefit to the wider community as well as to the young person themselves. (The Young Foundation, 2013)

Groups of young people who meet on a regular basis, with the aim of bringing about change in policies and/or practices, or raising awareness, at a local, national or international level. (Roker & Eden, 2002)

A youth social action project is a multi-step process in which youth address an issue they care about, learn about it and potential solutions to solve it, then take action to create positive change on this issue. (World Savvy as cited in The Young Foundation, 2013)

In a review of literature on youth social action, Unell (2013) posits that despite these multiple definitions, there exists nonetheless a "common interpretation of youth social action as:

- Group-based, involving young people in working together and supporting each
 other towards agreed goals. While some groups may be locally-based and depend
 upon face-to-face communication, digital communications free young people to
 take collective action nationally, internationally and globally.
- Activist in nature. Young people identify an issue of common concern to the
 group, and work to achieve positive change. Once again, this may be an issue
 arising from their immediate environment, such as school or community, or it
 may be something that concerns them at a national or international level.
- Following a step-by-step process. A planned process is integral to youth social
 action. The young people take responsibility for each stage of planning and
 activity directed towards an agreed objective.

Owned by young people. While appropriate adult facilitation is critical, the action
is driven and managed by young people themselves. In pursuing their goals,
young people acquire real-life experience in managing social change. (p. 18)

Similar to the approach to service learning described above, youth social action is thus an approach to teaching and learning in which student voice plays a pivotal role in all stages of the project. In that youth social action is "activist in nature," there is also great emphasis placed on examining and questioning the status quo. As such, youth social action typically engages students in learning about and addressing issues of power, which in turn provides them with "real-life experience in managing social change." While service learning does not preclude the exploration of power dynamics, youth social action is often specifically designed to engage students in deconstructing and rethinking power dynamics.

The literature on youth social action also provides some useful clarification regarding the role of the adult in an approach to learning that is intended to be "owned by young people" (Unell, 2013, p. 18). Unell (2013), for example, refers to "adults as enablers of youth social action," asserting that although youth social action is by nature student-driven, "successful youth social action requires expert and sympathetic facilitation by adults" (p.19).

Why Youth Social Action and Service Learning in Middle School?

The middle grade years are characterized by rapid physical, intellectual, emotional, moral, and social development (Caskey & Anfara, 2007). As it concerns intellectual changes, AMLE (2010) writes:

Changes in the patterns of thinking become evident in the ideas and questions middle grades students express about the world and how it functions. These shifts may be apparent in the questions they pose to each other and to trusted adults, in their reflections about personal experiences, in their view on moral issues, and through their perceptions of stories, images and humor. They reveal new capacities for thinking about how they learn, for considering multiple ideas, and for planning steps to carry out their own learning activities. However, because cognitive growth occurs gradually and sporadically, most middle grades students still require ongoing, concrete, experiential learning in order to achieve.

Both social action and service learning are experiential pedagogies designed to investigate the emerging questions of young adolescents regarding the world in which we live. Largely due to the real-world authentic contexts it provides, service learning at the middle level is widely advocated as a developmentally-appropriate pedagogy by the Association for Middle Level Education. Youth social action, likewise, is associated with numerous positive student outcomes including the development of new skills in the areas of communication, leadership, planning and problem solving as well as socio-emotional benefits such as confidence, resilience, and agency (McNeil, Reeder & Rich, 2012). Although these approaches have the potential to address many of the AMLE characteristics, the centrality of youth voice and action in both approaches are especially conducive to the following two: 1) Students and teachers are engaged in active, purposeful learning, and 2) Curriculum that is challenging, exploratory, integrative, and relevant. The relationship between these approaches and these two characteristics will be clarified in the following two sections.

Students and teachers are engaged in active, purposeful learning. Active and purposeful learning are at the core of service learning and social action since they challenge students and teachers to defy pervasive models of teacher-centered instruction and passive learning through the design of "hands-joined" units of instruction that give students agency in what and how they will learn. The role of "hands-joined" learning in the middle school concept is described by the AMLE (2012) as follows:

Developmentally responsive middle grades educators take the concept of handson activities further by promoting what might be termed "hands-joined" activities, ones that teachers and students work together in developing. Such activities foster ownership and lead to levels of understanding unlikely to be achieved when students are simply completing teacher-made assignments. (p. 16)

Herein, the IPARDC service learning process provides a useful framework through which students and teachers can collaboratively construct their understanding of a community issue, co-develop a plan for action, enact this plan, problem-solve as needed, reflect, and ultimately envision how they might share what they have learned with community and school members. The IPARDC process thus positions middle level teachers to meaningfully support their students in developing as self-determined learners (Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan & Deci, 2000, 2009), an objective which research suggests paradoxically decreases dramatically as students move through the K-12 continuum (Hagenauer & Hascher, 2010; Hansen, 2010; Marchand, 2008). The IPARDC process also necessarily asks that the middle level teacher engage in ongoing inquiry into teaching, challenging them to develop instructional units in response to student interests and ideas, rather than in advance. As such, this model of planning and

instruction compels the middle level teacher to be actively learning alongside the students, exploring new topics and complex problems with them and adjusting instruction and planning accordingly.

Curriculum is challenging, exploratory, integrative, and relevant. Through the investigation of a community issue of interest, service learning and youth social action pose an opportunity for middle level students to explore complex real-world problems, engaging skills and processes that cut across multiple disciplines. These approaches thus present an opportunity for middle level teams of teachers to develop interdisciplinary units of instruction that are rooted in the exploration of a shared issue of interest, yet nonetheless standards-based. Rigor is elevated by a commitment to active, purposeful learning, which challenges students to engage higher-order thinking skills to understand, analyze, evaluate, and create throughout all phases of the work. In this way, service learning and youth social action make the development of a relevant curriculum possible by engaging students in work that is not only relevant to their lives, communities, and own ideas, but also relevant to the cognitive work required of civic participation and problem-solving outside of school (Resnick, 1987).

These approaches to teaching and learning are also directly aligned with the goals for middle level education (National Middle School Association, 2010), which hinge on what a young adolescent needs to become "a fully-functioning, self-actualized person" (p. 11). While a full list of AMLE goals can be found in Appendix B, two of these goals capture the centrality of civic action and democracy education to the middle school concept:

- Understand local, national, and global civic responsibilities and demonstrate active citizenship through participation in endeavors that serve and benefit those larger communities (p. 10)
- 2) Become actively aware of the larger world, asking significant and relevant questions about that world and wrestling with big ideas and questions for which there may not be one right answer (p. 11).

In this sense, a relevant curriculum is one which prepares young adolescents for civic participation in our democracy through schools that serve as "sites of social transformation where students are educated to become informed, active, and critical citizens" (Giroux, 2009, p. 443). While these goals undergird those of middle level education and the middle school concept (See Appendices A and B), the centrality of democracy education (Beane, 2005; Stowell et al., 1995) to the middle school concept seems all but forgotten in the "headlong rush into standardized testing and the consequent impoverishment of the middle school curriculum" (Dickinson & Butler, 2001, p. 2). Engaging students in civic action in their own communities via service learning and youth social action can thus be used as means to restore democracy education as a focal point of the middle school concept.

Middle School Environment

As will be described in greater detail in Chapter 4, based on input from their middle school students, the focus of the collaborative inquiry group's reform-oriented innovation was aimed at investigating, proposing, and implementing new ways to promote a "positive school culture" at their field placement school. This focus resonates with one of the AMLE Culture and Community characteristics: the school environment is

inviting, safe, inclusive, and supportive of all. This AMLE vision of a developmentally-appropriate middle school environment is further described as follows:

A successful school for young adolescents is an inviting, supportive, and safe place, a joyful community that promotes in-depth learning and enhances students' physical and emotional well-being.

Resources provided by the National Forum to Accelerate Middle Grades Reform (2014) and its initiative, Schools to Watch (2014) further illuminate the features of developmentally-appropriate middle school environments through published self-study rubrics that address four domains: academic excellence, developmental responsiveness, social equity, and organizational support and processes (Schools to Watch Rubric, 2014). The following criteria from these rubrics are particularly relevant to the school environment characteristic:

Developmental Responsiveness

- The staff creates a personalized environment that supports each student's intellectual, ethical, social, and physical development.
 - Small learning communities are characterized by stable, close, and mutually respectful relationships.
 - Every student has a mentor, advisor, advocate, or other adult he/she trusts and stays in relationship with throughout the middle school experience.
- Students have opportunities for voice---posing questions, reflecting on experiences, and participating in decisions and leadership activities.

- All students have a real say, or have legitimate representation, in what happens at school
- Staff members provide all students with opportunities to develop citizenship skills, to use the community as a classroom, and to engage the community in providing resources and support.
 - Students take on projects to improve their school, community, nation,
 and world

Social Equity

- The school community knows every student well.
- The school's reward system is designed to value diversity, civility, service, and democratic citizenship.

The emphasis on trusting relationships and community in these criteria are informed by the complex social development in early adolescence. Despite the "shifting allegiance from adults to peers" that takes place in the middle school years, middle school students also paradoxically "hunger for informal interactions and conversations with caring adults" (AMLE, 2010, p.7). These criteria are also informed by the tenets of self-determination theory, which asserts that people have three fundamental needs: competence, autonomy, and relatedness. While a need for the development of competence in schooling is perhaps obvious, these criteria suggest that school environments must also address students' needs for autonomy (i.e., voice) and relatedness (i.e., stable, close, mutually respectful relationships). Indeed, empirical research on student perspectives indicates that "student perceptions of their middle school environment influence adolescents' behavioral, affective, and cognitive engagement in

school, which in turn influence their academic achievement" (Wang & Holcombe, 2010, p. 656). Additionally, the findings from this research further point to the importance of relatedness in middle school by demonstrating that "students are more likely to participate in school and bond with school when teachers create a caring and socially supportive environment, because such school contexts meet students' needs for relatedness" (p. 655). These findings further affirm research that suggests that adolescents have an especially high need for mutually supportive relationships (Midgley, Feldlaufer, & Eccles, 1989).

Additionally, as it concerns school environment, empirical research from the previously mentioned McEwin and Greene (2010) study indicates that highly successful middle schools averaged a 61% implementation score as opposed to a 42% average in their randomly selected counterparts. In that the middle school concept is made up of an interrelated web of characteristics, school climate influences and is influenced by all other characteristics. For this reason, while academic achievement may be commonly thought of in relation to "curriculum, instruction, and assessment" characteristics, this research also serves as a reminder that "attempts to separate school climate issues from the academic mission are doomed to fail in the long run" (Association for Middle Level Education, 2012, p. 142).

Researcher Assumptions

Although this research is deeply rooted in the previously reviewed literature, I am aware that my background and experiences have also led to a set of assumptions about teaching and learning. These assumptions in turn inform my understanding of key ideas

that undergird this work and are thus described briefly in this section for the purpose of transparency.

First, I believe in the middle school concept and middle school philosophy. As a middle grades teacher who has had the privilege of working with hundreds of students in multiple middle schools, I have a deep appreciation for the particular nature of this age group. Informed by my own experience as well as the rich body of literature that supports its vision, I fully ascribe to the goals and characteristics of the middle school concept. Although I understand that school communities face many obstacles in implementing the middle school concept, I do not interpret this as a reflection of a flawed middle school vision. Rather, I interpret these obstacles to be largely a symptom of an educational system in which external pressures have made developmentally-appropriate schooling increasingly challenging.

Second, I believe in the need for specialized middle level teacher education. In keeping with my appreciation for the particular nature of the middle school age and thus the necessity of the middle school concept, I also believe that teachers must be prepared for the unique task of teaching middle school. By focusing exclusively on middle grades teaching, specialized middle level teacher education programs are uniquely positioned to advance the development of prospective middle school teachers. I believe these programs can, for example, more specifically focus on goals such as the development of a deep commitment to the age group, rich appreciation for middle school philosophy, and proficiency in those teaching practices that facilitate the characteristics of the middle school concept.

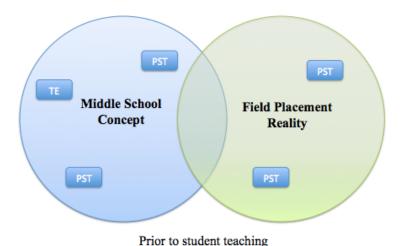
Third, I believe that teacher education and professional development is most powerful when it is inquiry-based rather than prescriptive. While I acknowledge that there is a time and a place for knowledge transmission in teaching and learning, I believe that in order for teachers to truly own novel approaches to teaching, they must be encouraged to inquire into their use in their classroom. Positioning teachers as inquirers is also a deliberate move to honor their expertise and agency, thus disrupting the view of teachers as passive recipients of reform that is done unto them and their students. Additionally, since all teaching must be responsive and thus adapted to suit the needs and interests of each school community, framing teacher education and professional development as authentic inquiry is also conducive to this necessary adaptation.

Conceptual Framework

In this section, I draw on the previously reviewed literature on perennial challenges in teacher education to present a conceptual framework (Figures 2.2, 2.3, and 2.4) to illustrate 1) a predicted trajectory of student teacher perspectives in specialized middle level teacher preparation programs in the context of middle level education reform, and 2) how I envision that Reform-Oriented Collaborative Inquiry in middle level teacher education might disrupt this trajectory.

Given the uneven nature of middle level education reform, the extent to which the middle school concept is evident in field placement schools will vary. We can assume, however, that in all schools there will be some overlap between the vision (theory) and the reality (practice), yet many gaps remain. In Figures 2.2, 2.3, and 2.4, the status of middle level education reform at a given field placement school is represented by two interconnected circles, one of which represents the vision of the middle school concept

(left) and the other the field placement reality (right). The space in which the two circles overlap represents the extent to which the middle school concept is evident in the field placement school. As the context in which student teachers will teach, this visual is used as the backdrop for student teacher trajectories as they transition from coursework to student teaching.



The to stadent teaching

Figure 2.2 Student teacher perspectives regarding middle level education reform prior to student teaching.

Prior to and during student teaching, the teacher educator (TE in the figure) is likely to have a strong foundation in the middle school concept, yet may lack familiarity with the field placement school. As such, the teacher educator is represented as being inside the circle to the left. Although student teachers (PST in the figure) in specialized middle level teacher preparation programs will have developed familiarity with the middle school concept, the extent to which they understand and are comfortable with the AMLE vision will also vary. Drawing on their own experiences and perspectives, some student teachers may be inclined to reject the reform-minded middle school concept as unrealistic, while others might be passionate about the vision yet know little about the

realities facing middle schools. Therefore, prior to student teaching (as is illustrated in the first Venn diagram in Figure 2.2), student teachers will fall anywhere along a spectrum from most comfortable with the reform-oriented middle school concept (the left circle) to most comfortable with traditional middle school models (the right circle).

As student teachers transition into student teaching, however, they are submerged in the field placement reality. If the relationship between the middle level vision and the reality is not problematized, teacher socialization forces paired with the practical demands of student teaching may result in the effects of reform-oriented coursework being "washed out" (Zeichner & Tabachnick, 1981a) by the pre-existing tradition of the field placement school. Some student teachers may, of course, attempt to innovate in isolation. Since reality is more tangible and immediately urgent than the reform-minded vision, however, the demands of the field placement reality are likely to nonetheless gradually gain primacy in the minds of student teachers no matter how reform-minded they may be. This trend is represented in Figure 2.3 below.

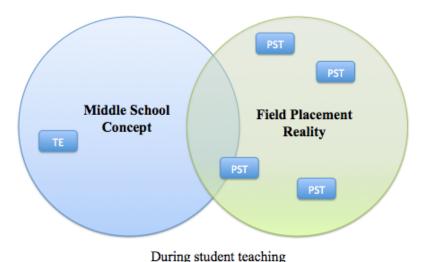


Figure 2.3 Student teacher perspectives regarding middle level education reform during student teaching.

As is illustrated in Figure 2.4, however, I propose that although student teachers will enter student teaching in the same manner as was described in Figure 2.2, the Middle Level Collaborative Inquiry Cycle presents an opportunity to disrupt this trajectory. Engaging in ROCI deliberately positions student teachers and teacher educators to collaboratively examine the intersection of the middle school concept (theory) and the reality of the field (practice). As a result, their work is firmly grounded in both. By examining the overlap, clarifying the nature of the gaps, and always asking "what could be?," the collaborative inquiry group is able to thoughtfully develop innovations that are both reform-oriented and responsive to the local school. The collaborative inquiry group is, therefore, instrumental in producing new local knowledge and because of their innovation, the overlap between field placement reality and the middle school concept is subsequently expanded.

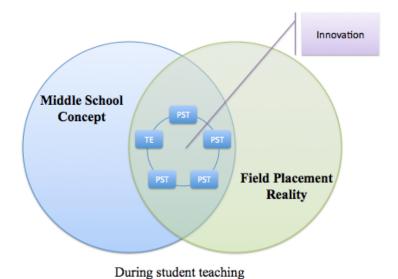


Figure 2.4 Student teacher perspectives regarding middle level education reform during student teaching with ROCI.

In this chapter, I reviewed some of the perennial challenges in teacher education, discussed the creation of hybrid spaces in teacher education, and presented several innovations in middle level teacher education. I then reviewed several models of collaborative inquiry as well as empirical research on its utility as an instrument for furthering education reform. Since the focus of the collaborative inquiry at the core of this dissertation is a student-driven social action project aimed at creating a more positive school culture, I then introduced the key features of youth social action, service learning, and middle school environment. In closing, I synthesized the key ideas from my literature review into a conceptual framework that serves as the basis for the development of Reform-Oriented Collaborative Inquiry (ROCI) and this research. In the next chapter, I describe my methodology, introduce the participants, and describe the context for this work.

CHAPTER 3: METHODOLOGY

The research described in this dissertation involves two layers, at the center of which is the introduction of a proposed model for Reform-Oriented Collaborative Inquiry (ROCI) with a particular focus in this work on its use in the context of middle level education reform. In the sections that follow, I begin by introducing the proposed ROCI model (described in greater detail as part of the findings in Chapter 4) followed by a description of participant selection as well as the setting of the research. I then review the nested design of the study and detail the data collection and analysis methods for Study 1 and 2.

Since the collaborative inquiry and some of the data sources were adapted from the original proposed study, I have chosen to describe the revised version in this chapter. In Chapter 4, however, I discuss the changes that were made, why they were made, and what these changes indicate about collaborative inquiry in practice. Additionally, since Chapter 4 is built around a detailed description of ROCI in practice, what follows here is a general overview of ROCI as it pertains to my methodology.

Reform-Oriented Collaborative Inquiry (ROCI)

When it comes to education reform, the struggle to break from the status quo takes place in real classrooms, schools, and communities, with all of the complexity these entail. Successful middle level education reform, therefore, compels those involved to not only develop a deep understanding of the AMLE middle school concept but to also cultivate rich situated knowledge about a given middle school. The ROCI model (Figure 3.1) proposed in this dissertation is hence specifically designed to support student teachers and teacher educators in developing reform-oriented innovations that are

uniquely responsive to the local school in which they are student teaching. Although this model will be subsequently discussed as it pertains to middle level teacher education and education reform in particular, I envision that variations of the ROCI model could be applied to multiple education reform contexts, including inquiry into reform-oriented teaching in various content areas, grade levels, and innovative school models.

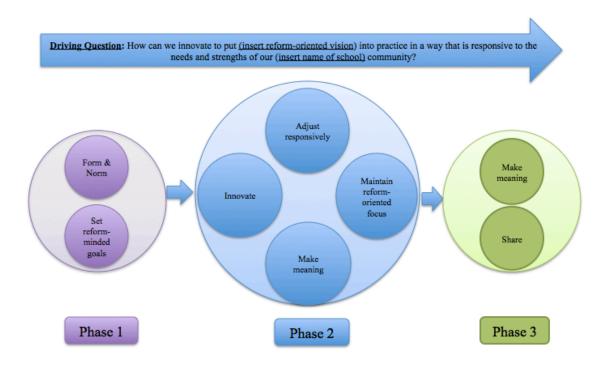


Figure 3.1. Reform-Oriented Collaborative Inquiry (ROCI).

Through an emphasis on collaboration, ROCI is designed to engage a small group of student teachers alongside a teacher educator in middle level education reform at a given school. The collaborative inquiry is guided by the driving question at the top of the figure *How can we innovate to put* (insert reform-oriented vision) into practice in a way that is responsive to the needs and strengths of our (insert name of school) community?

As such, ROCI challenges the teacher educator and student teachers to innovate at the

intersection of reform-oriented visions of teaching (theory) and the current state of actual schools and classrooms (practice).

In this way, ROCI has also been purposefully designed with perennial challenges in teacher education in mind. Throughout the collaborative inquiry, academic and practitioner knowledge are brought together dialectically to innovate in ways that are responsive to the local school. An emphasis is placed on examining, for example, challenges faced throughout the collaborative inquiry, bringing to the surface the ways in which the transfer of reform-minded theory to practice in the local context can be particularly problematic. As such, ROCI has been designed to 1) emphasize inquiry into the implementation of the middle school concept, 2) encourage productive collaborations, and 3) emphasize local knowledge as the collaborative inquiry group innovates at the intersection of theory and practice.

The heterogeneous make-up of the inquiry group is a purposeful move to encourage the work of the inquiry group to be dialectical, purposefully examining the tension that resides between theory and practice. This blend of academic and practitioner perspectives is intended to fortify the collaboration and resulting innovation with a certain amount of "checks and balances." While all members of the group should have an eye for reform and reality, the teacher educator's and student teachers' perspectives on the innovation will likely differ. The collaboration is thus intended to bring together these two perspectives. Although there are many variations of collaborative inquiry, ROCI is informed by three particular examples. First, ROCI loosely follows the four-phase framework presented by Bray et al. (2000). In addition, ROCI is also informed by cycles developed by Nelson (2009; See Appendix E) and Deering et al. (2003, See Appendix F),

both of which are designed to honor local knowledge and inquiry that is "determined by teachers and grounded in their classrooms" (Nelson, 2009, p. 553). The emphasis in ROCI on innovation that is uniquely responsive to the local school is directly influenced by Deering et al.'s (2003) commitment to the "locally based development" of an innovation rather than simply adopting an approach as-is (p. 33). Likewise, activities engaged in during Phase 1 and Phase 2 of ROCI are informed by the first phase of Nelson's (2009) PRiSSM PD cycle, in which teachers "develop a common vision for teaching and learning" (p. 553) and compare their current practice to this shared vision before launching an inquiry.

The Phases of ROCI

The ROCI model consists of three phases, each of which is associated with a set of inquiry activities. A visual depiction of the ROCI model has been provided in Figure 3.1 along with an overview of example activities for each phase of the model (Table 3.1). While the three phases are intended to be used chronologically (as indicated by the arrows), the inquiry activities at each phase are purposefully represented within larger circles to signify that they may be employed in any order and are often used simultaneously depending on what the inquiry group determines is best suited to their needs at the time. The following sections provide a loose description of the phases for the purpose of understanding the methodology the collaborative inquiry group employed. A more detailed description of exactly what these phases looked liked in action with a collaborative inquiry group of student teachers and one teacher educator at a given middle school is provided in Chapter 4.

Table 3.1 Phases of ROCI and Associated Activities		
Phase	Collaboration Activities	Examples
1	Form & Norm	Initiate collaborative inquiry group Gain institutional consent Create norms and procedures for collaboration
	Set Reform- Minded Goals	Identify and reflect on the characteristics of the reform-oriented vision the group is committed to Evaluate the field placement using these characteristics Explore overlap and gaps Identify available school assets/resources as well as group interests Consider do-ability Identify a reform-oriented and responsive focus based on all of the above
	Innovate	Envision a reform-oriented innovation that is tailored to the local school context Make a plan for developing, implementing, and evaluating the innovation Create necessary materials Determine an end point for Phase 2 Implement innovation
2	Adjust Responsively	Meet to discuss progress and trouble-shoot Communicate with key stakeholders and take their feedback into consideration Make responsive adjustments as needed
	Maintain a Reform-Oriented Focus	Remind group members and colleagues of reform-oriented goals Ensure that changes and decisions made remain in line with reform-oriented goals Share resources tied to reform-oriented goals
	Make Meaning	Discuss relevant data associated with innovation Critically and collaboratively reflect on challenges, benefits, and realizations associated with the innovation Share realizations
3	Make Meaning	Discuss relevant data associated with innovation Critically and collaboratively reflect on challenges, benefits and realizations associated with the innovation and the collaborative inquiry experience Critically and collaboratively reflect on strategies developed to navigate challenges Consider next steps, possibly returning to Phase 1
	Share	Share innovation and critical reflection with professional learning community

Phase 1. The first phase takes place as the collaborative inquiry group is becoming familiar with one another and the school. At this phase, the collaborative inquiry group engages in the following two inquiry activities: *Form & Norm* and *Set reform-minded goals*.

Form and norm. This inquiry activity refers to tasks designed to build rapport, establish roles, and assist the group in agreeing on group norms. At this point logistical issues concerning where and when to meet, preferred methods of contact, and any designated roles should be decided. Additionally, the group may also choose to create collaborative spaces within which to share materials (e.g., Google documents, a Dropbox folder, etc.).

Set reform-minded goals. At the same time as they are forming and norming, the inquiry group reflects on the characteristics associated with the reform-oriented vision they are committed to (ex. middle school philosophy, place-based education, critical pedagogy, culturally relevant pedagogy, etc.), evaluates the field placement setting based on these characteristics, and reflects on how they make sense of overlap and gaps. Based on this reflection, they begin to identify a reform-oriented and responsive focus based on these reflections. Given that ROCI is designed to support student teachers in particular, balancing a reform-oriented focus with do-ability is of particular emphasis in this phase since the role of student teachers can be limited in influence and the student teaching year is one that is marked with considerable stress. This first phase is over once the group feels prepared to move into developing a specific reform-oriented innovation.

Phase 2. The second phase is the heart of ROCI and consists of the following inquiry activities: *Innovate*, *Adjust responsively*, *Maintain a reform-oriented focus*, and

Make meaning. As previously mentioned, the activities may be employed in any order and are often used simultaneously depending on what the inquiry group determines is best suited to their needs at the time.

Innovate. To innovate, the inquiry group envisions a reform-oriented innovation that is tailored to the local school context, makes a plan for developing, implementing, and evaluating the innovation, creates necessary shared materials, and implements the innovation. While planning for the innovation, the inquiry group must also determine at which point they plan to transition to Phase 3. In other words, while the innovation they develop in this phase might continue beyond the scope of the collaborative inquiry, the group must decide at which point they would like to end the collaborative inquiry.

Making this decision can be guided by questions such as Is our innovation a time-bound event (ex. project, unit, etc.)? If so, when will it be over? If not, at which point do we feel we will have engaged in the innovation enough to be able to make meaning and share our work with others? In the case of student teachers and in the name of do-ability, this decision should also be informed by other responsibilities, the practicum calendar, course deadlines, summative assessments, etc.

Adjust responsively. As the innovation is being developed, shared and even after it is launched, however, a commitment to being responsive and partnership-oriented compels the inquiry group to adjust responsively. To engage in this inquiry activity, the inquiry group meets regularly to discuss progress and trouble-shoot, communicates with key stakeholders, takes their feedback into consideration, and makes responsive adjustments as needed.

Maintain a reform-oriented focus. At the same time, however, inquiry group members must balance being responsive with their commitment to the reform-oriented vision they are committed to and as such, must work together to maintain a reform-oriented focus. With this in mind, participants should remind both group members and colleagues of reform-oriented goals, ensure that changes and decisions made remain in line with reform-oriented goals, and share resources tied to reform-oriented goals with key stakeholders.

Make meaning. Throughout all of this, the group works together to make meaning. Group members critically and collaboratively reflect on challenges and benefits they are experiencing, share strategies for navigating challenges, discuss realizations, and work to make sense of their experiences as they engage in reform-oriented collaborative inquiry. As relevant data is collected (student work, feedback, etc.), inquiry group members may choose to bring these to inquiry group meetings to share and collaboratively analyze. This second phase is over once the group reaches the previously agreed-upon end point for Phase 2.

Phase 3. This final phase consists of the following inquiry activities: *Make meaning* and *Share*. The purpose of this phase is to engage in summative reflection and share the innovation and associated realizations with a meaningful audience.

Make meaning. Similar to making meaning in Phase 2, group members in phase 3 critically and collaboratively reflect on challenges and benefits they have experienced, share strategies for navigating challenges, and discuss realizations. The difference, however, is that the emphasis here is on summative reflection and synthesis. While data associated with the innovation is also discussed in Phase 2, the group will now be able to

use a discrete set of data to discuss and identify to what extent they feel the innovation was successful and what sense they make of this. Additionally, since this is the final phase of ROCI, the group will also be able to reflect upon and discuss the challenges, benefits, and developed strategies associated with the collaborative inquiry experience as a whole. At this point, the inquiry group should also consider next steps, which may involve refining the innovation or determining an alternative reform-oriented focus, which would consist of returning to Phase 1. In this way, the ROCI model can be viewed as a spiraling model, although due to time constraints, it is likely to only be used for one iteration in student teaching.

Share. At this point, group members identify a way to share their innovation and the group's critical reflection on challenges, benefits, and realizations with their professional learning community. This sharing may involve, for example, a presentation to relevant faculty in their field placement school, the leadership team, their cohort of student teachers, other cohorts, or to an audience of colleagues at a relevant professional conference

Participants

As the teacher educator and researcher in this study, I was one of the collaborative inquiry group members and thus also a participant. The following section reviews the methods for student teacher participant selection and addresses issues related to the description of the participants and anonymity.

Participant Selection

I first met the four participants in this study as students in my introductory middle level education course that took place the year prior to student teaching. Built with the

intent to provide students with a rich foundation in middle school philosophy, my course introduced the 16 characteristics of the AMLE middle school concept and challenged students to envision what these reform-oriented characteristics might look like in practice. Discussions in the class often circulated around how "realistic" this vision was, especially given the current emphasis on high stakes testing.

Based on these discussions (which have been described in greater detail in Chapter 1), I purposively selected three preservice teachers (Bobbi, Danni and Ray²) to participate in a summer focus group on the basis that they 1) expressed a clear interest in middle level education reform as evidenced by class discussions and reflections, and 2) raised important questions concerning their impending student teaching experience in the context of middle level education reform. The resulting focus group was designed to explore the felt needs and ideas of three student teachers committed to middle level education reform as they entered their final year of undergraduate work and sat on the precipice of student teaching. As has been previously discussed, the findings from this research (See Appendix C) were an impetus for this dissertation and greatly informed the creation of the ROCI model.

In addition to inviting the three participants from the summer focus group, a fourth student teacher, Charlie, was invited to participate. Charlie had been assigned to the same math/science team as Ray and since Bobbi and Danni had also been paired together in a math/science team, this decision was thus in the interest of equity among group members. In making this decision, I also hoped that the inclusion of two pairs would allow for unique collaborative planning possibilities which I suspected might

_

² All names used in this manuscript are pseudonyms

prove useful as we enter into the collaborative inquiry. Additionally, since teaming is an important component of the middle school concept, this pairing was in keeping with current AMLE professional standards for teacher preparation (2013). As a fortunate coincidence, Charlie had also consistently demonstrated an interest in the AMLE reformoriented vision in my course and on several occasions self-selected to work in a collaborative group with the other three participants.

The collaborative inquiry group size of four student teachers and one teacher educator has been kept purposefully small to allow for ease of collaboration and communication among the inquiry group members. This manageable group size is in keeping with the recommendation that collaborative inquiry groups consist of between five and twelve members (Bray et al., 2000). Additionally, from a research perspective, since this work is intended to closely examine ROCI as a process and potential pedagogy, the relatively small size of the inquiry group is intended to allow for the in-depth analysis of the experiences of a carefully selected few.

Similarly, the purposeful selection of participants who are interested in middle level education reform is a strategic choice to investigate the use of this pedagogy with student teachers who are already committed to the reform-minded AMLE vision. As such, this research does not explore the use of the ROCI with a sample that represents the range of commitment of student teachers to middle level education reform. Although such work would be an intriguing follow-up study, the research I propose here is positioned as a first step in a line of inquiry focused on collaborative inquiry in middle level teacher education as a means for education reform at the local level. Working with reform-minded student teachers seems a logical first step in this line of inquiry since an

understanding of how ROCI can support reform-minded student teachers is necessary before exploring its use with student teachers who may be less committed to middle level education reform. The same is true for the decision to pair prospective participants with mentor teachers who are open to innovation, which will be discussed in the next section.

Description of Participants

All four student teachers who participated in this study identified as White/Caucasian and ranged in age from 23-38 (Exact ages: 23, 26, 26, and 38) at the start of this work. Beyond this basic description, I have purposefully chosen to limit my description of participants to protect participant anonymity. Due to the sensitive nature of many of the critical views expressed by the student teachers, anonymity is especially important in this study. This decision is in keeping with Miles, Huberman and Saldana's (2014) recommendation that in complex cases where local identifiability is of concern, "you may need to err on the side of protecting anonymity" (p. 63). The results of this study rely heavily on student teacher perspectives and experiences, which were at times critical. For this reason, the decision to provide minimal identifiable description is a move to prevent any of these criticisms from being traceable to individual participants. Additionally, since three of the four student teachers were of the same gender, genderbased description would pose a threat to anonymity. To minimize this threat, each student teacher selected a gender-neutral pseudonym. I have attempted to minimize my use of gender-specific pronouns, and when necessary, have opted to refer to all student teachers using the feminine pronouns.

Classroom Assignments

Unfortunately, although the findings of the summer focus group indicated the

importance of the student and mentor teacher relationship, the limited time and financial resources at our field placement school in addition to the adoption of a new Common Core curriculum made the participation of mentor teachers in this work unmanageable. The student teachers' identified need for relational support was thus provided through collaboration with reform-minded peers and a teacher educator and not through the direct involvement of mentor teachers in the collaborative inquiry.

To the extent possible, the prospective participants in this research were placed with mentor teachers who demonstrated an inclination towards inquiry-based learning in their classrooms as well as a willingness to take risks and try out new ideas. Since many factors go into the pairing of student teachers and mentor teachers, the professional development school (PDS) site coordinator considered my input along with a host of other factors in making the ultimate decision. The PDS site coordinator met individually with mentor teachers she thought would be most open to innovation and explained the basic premise behind this research, informing them of what it would involve. All four mentor teachers were agreeable to the possibility and in the end, I was assured that, at the very least, the designated mentor teachers would be open to innovation.

As part of the requirement for math and science dual certification programs, student teachers received two classroom assignments in the same school, spending the first half of their student teaching semester in Placement 1 and the second half in Placement 2. In the case of my four participants, this also meant that the following pairs traded mentor teachers and classes mid-way through student teaching: 1) Bobbi and Danni; 2) Ray and Charlie. Bobbi and Danni rotated through placements in seventh grade Science and eighth grade Math; Ray and Charlie rotated between eighth grade Math and

Science. The eighth grade mathematics placement through which Ray and Charlie rotated was within the Talented and Gifted (TAG) program (described below under Context).

Due to the collaborative inquiry focus identified by our group, the innovation we developed took place exclusively during a class period that had been designated by the field placement school for intervention and enrichment (referred to here as I/E) and could be described as a "homeroom" of sorts. (The reason for this decision will be explained in greater detail in Chapter 4.) This homeroom period was forty minutes in duration and the four homerooms ranged in size from 17-30 students with a total of 104 enrolled students in all four I/E classes. The I/E class for the Talented and Gifted (TAG) classroom was by far the smallest with 17 students (several students were pulled out of I/E period to participate in other TAG enrichment activities) and the other three classes had 28, 29, and 30 students enrolled. Prior to the implementation of student teachers' innovation, homeroom time was used in a variety of ways depending on the team, teachers, and time of year (e.g., study hall, remediation, enrichment clubs, and test preparation as the statewide testing approached). Although the student teachers switched between Math and Science placements mid-semester, for the sake of continuity of their innovation, the student teachers chose to remain with their original homerooms for the duration of the collaborative inquiry.

Context

In this section I provide an overview of the middle level teacher preparation program and field placement school in which all four participants were student teaching.

Middle Level Teacher Education Program

All four of the student teachers who participated in the collaborative inquiry

group were concurrently enrolled in an undergraduate Middle School Math and Science (grades 4-9) program at a large Mid-Atlantic university. At the time of this study, the program was in its second year and the student teachers participating in this study were in the first cohort of student teachers in the program. The course of study for dual certification in Mathematics and Science consists of a rigorous program including: 1) Pre-professional courses in Mathematics and Science subject areas, 2) Pre-professional education courses in schooling, teaching and learning, middle school philosophy, reading across the curriculum, educational psychology, and adolescent development (some of which include concurrent field placements working with students in classrooms and after-school programs), 3) Professional education courses that include math and science methods, interdisciplinary middle school teaching methods, diversity and equity courses, middle school field experiences, and a course that focus on the teaching of English Language Learners and students with special needs.

In the student teaching year of this program, during which this study took place, student teachers are engaged in increasing amount of field placement work, continue their coursework, and towards the end of the year, complete the Teacher Performance Assessment (edTPA). Beginning in September of the fall semester, student teachers have the option to work one full day a week in their field placement or two half days. All students concurrently take three professional education courses in the fall: Part 1 of their interdisciplinary methods and equity courses as well as a course that focuses around instructional strategies for special education students and English language learners. Beginning in January, student teachers transition to full-time student teaching (five days a week) while participating in three concurrent professional education courses: Part 2 of

their equity course and interdisciplinary methods course as well as a seminar designed to cover a variety of topics relevant to student teaching and edTPA. Student teaching responsibilities during this spring semester are intended to gradually increase in intensity, peaking in the month of April and then decreasing gradually in intensity as the end of student teaching approaches in May. To fulfill the requirements of a dual certification program, student teaching time is divided between two placements (one Mathematics and one Science classroom), which results in student teachers spending the months of September through February in their first placement (part time from September through December and full time in January and February) and full time from March through early May in their second placement. This arrangement results in student teachers switching to a new mentor teacher and, in some cases, to an entirely new team of students in the month of March.

Lakeview Middle School (LMS)

At the time of this study, all student teachers enrolled in our undergraduate Middle School Math and Science program completed their student teaching at the same field placement school, hereafter referred to by the pseudonym Lakeview Middle School (LMS). In 2013, LMS enrolled 1,154 sixth, seventh, and eighth grade students in a large suburban Mid-Atlantic public school district. According to demographic data publicly available online, in 2013, the LMS student population was 51% Black/African American, 30.5% Hispanic/Latino, 7.6% White, 6.4% Asian, 3.8% two or more races, with the remaining .7% unspecified. Sixty-four percent of the student population was eligible for free or reduced lunch. Lakeview Middle School also hosts a popular Talented and Gifted (TAG) program in which TAG identified students are admitted via a public school

district lottery. This TAG program is organized as a "school within a school" model which, based on my own observations, offers smaller class sizes that are not racially representative of the larger student population, with White and Asian subgroups overrepresented.

LMS is housed in a state-of-the-art building featuring "green" design elements such as a garden roof, a physical education room with machines that use green energy, a courtyard at the center of the school, and numerous strategically placed windows that offer ample natural light. Standard classrooms feature triangular desks to accommodate right and left-handed users as well as various grouping arrangements and retractable walls between classes are designed to facilitate teaming and interdisciplinary collaboration across classrooms. Science laboratory classrooms are spacious and well equipped with materials. Hallways are brightly colored although noticeably absent of student work displays. In keeping with its modern building, LMS is also technology rich, featuring a modern media center, TV studio, and family consumer sciences classroom. Classrooms are outfitted with Smartboards, projectors, and televisions and classroom sets of Ipads are available upon request.

Professional Development School (PDS) Relationship

LMS is one among many schools within our College of Education's Professional Development School network. The National Council for Accreditation of Teacher Education (NCATE) (2014) outlines the professional development school relationship as follows:

Professional development schools (PDSs) are innovative institutions formed through partnerships between professional education programs and P–12 schools.

PDS partnerships have a four-fold mission:

- the preparation of new teachers,
- faculty development,
- inquiry directed at the improvement of practice, and
- enhanced student achievement.

PDSs improve both the quality of teaching and student learning. PDSs are often compared to teaching hospitals, which are also hybrid institutions created in the early twentieth century. As practicing professions, both teaching and medicine require a sound academic program and intense clinical preparation. The teaching hospital was designed to provide such clinical preparation for medical students and interns; PDSs serve the same function for teacher candidates and in-service faculty. Both settings provide support for professional learning in a real-world setting in which practice takes place.

As part of this PDS relationship, preservice teachers in our secondary and middle level programs participate in a variety of field experiences at LMS. Additionally, designated PDS school and university faculty collaborate in a variety of PDS related initiatives, including professional development activities and an annual PDS conference.

Our PDS partnership relationship with LMS is further informed by a Memorandum of Understanding (MOU) between the county public school district and our College of Education (CoE) in regards to the mission of our PDS partnership. The MOU document is intended to specify the nature of our collaboration with PDS schools within the public school district and arguably, although this has not been my experience, facilitate collaboration that supports teaching and learning. The following three goals are

excerpted from our MOU with the public school district in which LMS is housed and are particularly relevant to this study:

- Provide enhanced clinical practice experiences for CoE candidates through the integration of theory and practice in a clinically based teacher education program.
- Promote collaborative practices that support the inquiry into and refinement of
 effective practices in teaching and learning by teacher candidates, CoE faculty
 and profession staff, and county teachers and administrators
- Disseminate research-supported practices and structures to the education community

At the time of this study, the PDS relationship with LMS was in its second year and the student teachers in this study were in the first cohort of student teachers to be placed at LMS. Thus, the PDS relationship with LMS was in its relative infancy.

Nested Research Design

As previewed in Chapter One, this research employs a nested design (Figure 1.1) as a means to examine the use of Reform-Oriented Collaborative Inquiry through two different lenses. Study 1 seeks to describe the ROCI model in action as well as the impact of the innovation on student perceptions of their learning experiences. Study 2 is designed to complement Study 1 by investigating the experiences and perspectives of inquiry group participants throughout the phases of ROCI. To assist you in making sense of the nested design and keeping track of the data sources described below, Figure 3.2 is provided as an illustration.

Study 1

For this first study, the four participants and I (the teacher educator) engaged in the proposed ROCI model. Although ROCI is well suited to spiral, it is important to note that for the purpose of this research, the collaborative inquiry group engaged in only one iteration of the process.

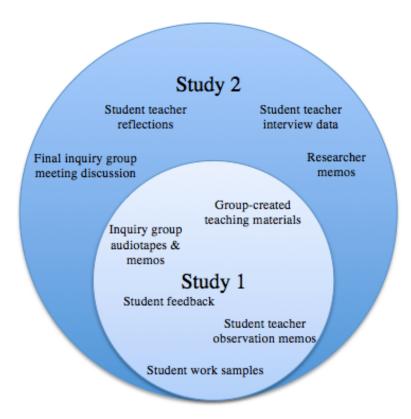


Figure 3.2. Map of data sources included in each study within the nested design.

Research questions. In keeping with the ROCI model, our collaborative inquiry was guided by the driving question, *How can we innovate to put AMLE characteristics* into practice in a way that is responsive to the needs and strengths of our middle school community? This question was used to help us develop and implement a unique innovation that was both responsive and reform-oriented. This innovation eventually took

the form of a student-driven social action project, which is described in detail in Chapter 4.

Although the driving question was used to guide us through the phases of ROCI, for the purpose of the study, the following research questions were used to document and describe one example of ROCI in practice:

- 1. How did we as a group innovate to put AMLE characteristics into practice in a way that is responsive to the needs and strengths of our middle school community?
- 2. What does middle school student feedback indicate about their experience with our innovation?

Data collection. As we engaged in each of the phases of ROCI, five data sources were collected to address the research questions associated with this first study (see Table 3.2 for an explanation of which data sources align with each research question). These five data sources are each described below.

Inquiry group audiotapes and memos. At each inquiry group meeting, I took detailed notes for the group via a shared Google document. These notes served as a record for all group members of what took place in each meeting as well as any decisions that were made regarding next steps. These memos were subsequently revisited at the end of each group meeting.

Group-created teaching materials. As we progressed through the phases of ROCI, we created various teaching materials designed to assist the group in implementing their student-driven social action project. Group-created materials included, for example, a

student interest survey, big picture project maps, collections of links to resources, lesson plans, and reflections to be completed by students.

Table 3.2			
Research Questions and Data Sources			
Research Question	Data Sources		
STUDY 1: COLLABORATIVE INQUIRY			
1. How did we as a group innovate to put AMLE characteristics (see Appendix A) into practice in a way that is responsive to the needs and strengths of our middle school community?	Inquiry group audiotapes and memos Group-created teaching materials Student work samples Student teacher observation memos		
2. What does middle school student feedback indicate about their experience with our innovation?	Student feedback		
STUDY 2: QUALITATIVE INQUIRY			
1. What challenges did the group face throughout ROCI?	All		
2. What benefits, if any, did our group experience through participation in ROCI?			
3. What strategies, if any, did the group develop to cope with the challenges they faced throughout ROCI?	Inquiry group audiotapes and memos		
4. What, if anything, did student teachers learn about what it takes to participate in middle level education reform?	Researcher memos Student teacher interview data Student teacher reflections Final inquiry group meeting discussion		

Student work samples. Throughout the social action project, the middle school students completed and/or created the following types of work samples: input regarding project ideas, student interest surveys, a summary of class survey results, a dream list of school-wide initiatives to promote positive school culture, a variety of student-created proposals, and advertisements for upcoming events. Per the requirements of the school district research review board, parental consent and student assent were required in order for individual student work to be included in this research. These documents were ultimately received for 28 students. As such, although the student teachers collected, examined, and reflected on all student work as part of their teaching responsibilities, only the student work samples of these 28 students were included in data analysis.

Student feedback. At the end of the social action project, the middle school students completed a final reflection. This reflection was designed to provide students with an opportunity to provide critical feedback regarding the student-driven social action project concerning:

- their favorite and least favorite parts
- to what extent they felt it gave them a voice in their school
- the extent to which the project was important or "relevant" to them
- to what extent they felt the project made a difference in their school

A complete list of reflection prompts is provided in Appendix G. Per the requirements of the school district research review board, parental consent and student assent were required in order for individual student feedback to be included in this research. Of the 28 students who turned in these documents, 21 completed final reflections. As such, although the student teachers collected, examined, and reflected on all student work as part of their teaching responsibilities, the analysis of student feedback was limited to responses from these 21 students.

On the final celebration day of the social action project, the students also completed a banner activity in which they were asked to identify one lesson they were taking away from the experience of participating in this project. Per the requirements of the school district research review board, since the "Lessons to Remember" banners were collaboratively created and did not contain identifiable information, the analysis of all responses on the posters was permitted.

Student teacher observation memos. I observed each student teacher at least twice at various intervals of the social action project. Observations were informal and for

the sole purpose of seeing the student teachers put the innovation we developed into action. Although they were only a slice in time, they nonetheless assisted me in understanding each student teacher's approach to classroom activities and subsequently aided me in writing up a description of the project. These observations also frequently served as an opportunity for student teachers to pose questions regarding problems of practice since they were often immediately followed by an informal debriefing. During each observation and/or debriefing, I would record a short memo describing the activity and any specific teaching moves or phrases I had observed.

Data analysis. Analysis of the data sources described above was ongoing as these data were collected in each phase of ROCI but was ultimately collaboratively synthesized in the *Making Meaning* phase of ROCI.

Research question #1. Making meaning of the findings for the first research question consisted of reviewing the data sources and writing a description of 1) what we did at each phase of ROCI, and 2) the innovation that was ultimately created (the student-driven social action project). To accomplish this task, I began by organizing and reviewing the following data sources sequentially: inquiry group memos, group-created teaching materials, student work samples, and student teacher observation memos. As I reviewed the inquiry group memos, I also listened back to the inquiry group audiotapes, adding further detail to the memos as needed. As I reviewed these data sources, I created a detailed table with two parallel outlines---one to describe our activities as an inquiry group and the other to describe the classroom activities involved with the social action project. A third column was used to identify key group-created materials and student work samples to include as illustrations. In our final collaborative inquiry group session, I

shared an abridged version of this table with the group. As we reviewed the table, I solicited the group's input by asking the following questions: *Does this capture what we did? What might we need to take out or add in?* Based on their feedback, we revised the table until we felt it accurately captured our work.

Since the nature of this research was largely descriptive, the writing up of the final description of our work was an integral part of the analytic method, informed by Marshall and Rossman's (2010) assertion that in "choosing words to summarize and reflect the complexity of the data, the researcher is engaging in the interpretive act, lending shape and form—meaning—to mountains of raw data" (p. 222). This use of writing as an interpretive tool is also in keeping with Bray et al.'s (2000) assertion that writing may be used as a mode of making meaning in collaborative inquiry.

Research question #2. To investigate the second research question, I analyzed middle school student feedback that had been collected through final reflections and the "Lessons to Remember" banners. The student teachers and I co-developed the final reflections based on a variety of factors. As general feedback, we were interested in the students' favorite and least favorite parts of the project. Given the goals of the social action project (which will be described in detail in Chapter 4), we were especially interested, however, in student feedback concerning the extent to which they felt the project 1) gave them a voice, 2) was important or "relevant" to them, and 3) made a difference in their school. Lastly, we were interested in the lessons they reported learning through participation in the project.

Although the student teachers analyzed and reflected on all of the student feedback as part of their participation in ROCI, for the purpose of this study, I was only

allowed to use the reflections of the 21 students who provided consent. Since I did not feel it would be a valuable use of the student teachers' time, I completed the data analysis of this set of 21 separately. Table 3.3 shows which reflection prompts and data sources were analyzed for each category of feedback.

Table 3.3			
Categories of Feedback and Corresponding Data Sources			
Category	Data Source		
Favorite part of the	Final reflection prompts:		
project	 Think about the work you did in your I/E period to promote a positive school culture at your school. What were some of the highlights of this experience for you? Describe your favorite part of this project. What was so great about the part you described in question #2? Would you want to do a project like this again? (Circle one: Yes No) Why or why not? 		
Least favorite part of the	Final reflection prompts:		
project	 4. What was your least favorite part of this project? Why did you dislike it? 8. Would you want to do a project like this again? (Circle one: Yes No) Why or why not? 		
	9. If you had to do this project again, what would you want to do differently?		
Student voice	Final reflection prompts: 5. Do you feel that this project gave you a voice in your school? (Circle one: Yes No) Why or why not?		
Important or "relevant"	Final reflection prompts: 6. Was the work you did in Mod 2 to promote a positive school culture important to you? (Circle one: Yes No) Why or why not?		
Made a difference	Final reflection prompts: 7. Do you feel that this project made a difference in your school? (Circle one: Yes No) Why or why not?		
Lessons to remember	"Lessons to remember" banners Final reflection prompts: 10. What lesson are you taking away from this project?		

To analyze each category of feedback, I began by organizing the student responses into a "data display" for each category. For those prompts that asked the students to circle yes or no, I also tabulated the yes, no, and blank responses and recorded this tabulation on the

corresponding data display. I then inductively "pattern coded" (p. 86) within each category for themes in the student responses. As themes began to take shape, I also made note of solitary responses that did not seem to fit in with developed themes. The final set of themes and any remaining solitary responses were subsequently used as the basis of my writing of the results for each category.

Study 2

This second study was designed to investigate the various benefits and challenges the group experienced while engaging in ROCI during student teaching. While the input of student teachers was solicited as part of data collection, they were not involved in the analysis of data or identification of findings.

Research questions. Using a variety of qualitative methods, I investigated the following research questions:

- 1. What challenges, if any, did our group face throughout ROCI?
- 2. What benefits, if any, did our group experience through participation in ROCI?
- 3. What strategies, if any, did the group develop to cope with the challenges they faced throughout ROCI?
- 4. What, if anything, did student teachers learn about what it takes to participate in middle level education reform?

Data collection. To investigate these research questions, in addition to the data sources described in Study 1 above, four other data sources were collected and analyzed (see Table 3.1 for an explanation of which data sources align with each research question). These data sources are each described below.

Researcher memos. While data collection was ongoing, I made frequent use of researcher memos. These were used to capture events, interactions, observations, discussions and utterances that seemed related to a possible challenge, benefit, strategy, or student teacher insight regarding what it takes to participate in middle level education reform. I had originally intended to allot time during designated sessions for the inquiry group to explicitly discuss challenges and benefits as well as strategies and new insights they were developing. The time required to catch up, troubleshoot, and plan for the next phase of the project, however, made this all but impossible. I found, however, that these topics were discussed organically during inquiry group sessions as well as in conversations that took place outside of the inquiry group meetings, including informal conversations after observations, text message exchanges, email threads, and phone calls. When these moments arose, I would record them in my researcher memos. I also recorded the challenges and benefits I was experiencing as well as strategies I was developing to support the group. As data collection progressed, I would periodically use the researcher memos as a space to reflect on emerging patterns in these data. In this way, in addition to capturing units of data, these researcher memos occasionally served as "analytic memos" (Miles et al., 2014, p. 95), to facilitate my sense-making.

Student teacher interview data. (Audiotapes, memos and transcript segments)

Student teachers each participated in two individual interviews: 1) a Pre-ROCI interview, and 2) a Post-ROCI interview (see Appendix H for the interview protocol and research questions associated with each). Interviews were approximately 45-60 minutes in duration and were audio-taped. In an effort to provide reflection time, some of the post-ROCI interview questions were provided to the student teachers in advance (also see

Student teacher reflections below). During each interview, I took detailed notes, similar to what Strauss and Corbin (1998) refer to as "memo-writing" (p. 217) and prior to data analysis, listened to the audiotapes (each at least two additional times) to add more detail to memo notes than I was able to capture in real time. After coding these memos (see *Data analysis*), I subsequently returned to the audiotapes, using the memos as a frame within which to transcribe particularly pertinent and evocative segments of each interview to illustrate identified themes (See Appendix I). The creation of these transcript segments was thus an iterative part of the data analysis process, which is described in greater detail in the *Data analysis* section below.

Student teacher reflections. In preparation for their post-ROCI interview, each student teacher completed a brief reflection (often in the form of bullet points) in response to a few prompts tied to each of the research questions for Study 2 (See Appendix K). This reflection was used as a reference during their post-ROCI interview, after which it was left with me for analysis.

Final inquiry group meeting discussion. After all of the post-interviews and initial coding were complete, preliminary themes for research questions 1 and 2 were subsequently brought to the final inquiry group meeting for discussion. As we reviewed these preliminary themes, I solicited input from the student teachers using the following prompts: To what extent does this reflect your experience? and What would you add, change or take out? In this way, inquiry group participants were able to give input in the development of the preliminary results discussed below. We also further discussed the strategies and insights they had developed regarding the third research question, which in turn was used as a data source in the analysis of research question #3.

Data analysis. The analysis for Study 2 was guided by the following proposition by Miles, Huberman and Saldana (2014) that qualitative analysis consists of "three concurrent flows of activity: 1) data condensation, 2) data display, and 3) conclusion drawing/verification" (p. 12). Data condensation consisted primarily of coding the relevant data sources (See Appendix I), after which coded units of data across data sources were arranged in a data display (See Appendix J) to facilitate conclusion drawing. After these stages of analysis, I would return to the original data sources (e.g., audiotapes, transcript segments) to verify whether emergent conclusions held up at the "ground level" (Miles et al., 2014, p. 117). The following sections provide a brief description of how I used these activities to make sense of the data associated with each research question.

Research questions #1 and #2. The analysis for research questions #1 and #2 began by condensing data associated with each research question through first cycle deductive coding. Since these research questions lent themselves to categories, I began by reviewing all of the data sources and deductively coding units of data across two categories: challenges and benefits. This method is informed by the notion presented by Bogdan and Biklen (1992) that "particular research questions and concerns generate certain categories" (p. 173) for sorting qualitative data. When reviewing inquiry group memos, for example, I would tag line items or entire sections as a potential benefit or challenge. In the event that a potential challenge was also a potential benefit or vice versa, I used simultaneous coding to identify this section as both. Additionally, when working with the interview and inquiry group data, the detailed memos and audiotapes were used for first cycle coding. During this process, I also transcribed segments of the audiotapes that were identified during first cycle coding. Once I had coded all data sources and was

confident that I had captured all benefits and challenges, I created a data display of the units of data associated with each category (See Appendix J for an example).

I then inductively pattern coded data within each of these data displays to identify themes pertaining to each category (benefits and challenges). Once a potential set of themes was identified, I returned to the original data sources (e.g., audiotapes, interview memos, and transcribed segments) once again to see if these potential conclusions were verifiable. This also allowed me to deductively search for any further units of data pertaining to identified themes.

Themes were subsequently included in the findings based on the extent to which they were evident across participants and data sources. Coded units of data that could not be connected with other units of data (across participants or data sources) were not included. If a theme was apparent in units of data connected to at least two student teachers, it was included in the final set of themes. If a theme was not directly connected with more than one student teacher but was apparent across multiple data sources, it was also included. This allowed for the inclusion of the challenge "variation in mentor teacher expectations" since although Charlie was the only student teacher who felt in conflict with her mentor teacher, this challenge was discussed in multiple inquiry group meetings and influenced the group's decision-making. For the teacher educator benefits, which were discretely different than those of the student teachers, I decided which themes to discuss in the findings by using the following analytic questions: *How large or pervasive of a benefit/challenge was this? How likely is it to be useful to others in my position?*

Miles, Huberman and Saldana (2014) assert the following concerning the role of writing in qualitative analysis:

The act of writing text as you ruminate over the meaning of a display is itself a focusing and forcing device that propels further analysis. Writing does not come after analysis; it *is* analysis, happening as the writer thinks through the meaning of data in the display. Writing is thinking, not the report of thought. (p. 118)

In keeping with this approach, as part of my analysis, I also began writing text associated with each of the emergent themes. As I did so, I would occasionally notice that data associated with larger themes seemed to be made up of two distinct sub-themes. For example, it was not until I began writing about the "disconnect between College of Education and Lakeview Middle School visions of teaching" that I noticed the two sub-themes: 1) Limited school implementation and understanding of AMLE characteristics, and 2) perceived resistance to "new" ideas. I had originally identified a theme in the challenges by student teachers. To investigate potential sub-themes, I would return to the data display and data sources to see if the sub-themes could be verified. In this way, writing was once again an integral part of the iterative analytic process.

Research question #3 and #4. For the third and fourth research questions, I was interested in those strategies and insights that were developed through participation in ROCI. For this reason, I began by deductively coding the student teacher responses to post-ROCI interview questions 4, 5b and 5d across two categories: 1) strategies developed to navigate challenges, and 2) insights learned regarding "what it takes" to participate in middle level education reform at the local level (hereafter referred to as "new insights"). This first cycle coding revealed, however, that considerable overlap was apparent between these two categories. In the vast majority of instances, units of data could be simultaneously coded as both a strategy and a new insight. Student teachers

reported experimenting with strategic communication, for example, which was also reported as a new insight across participants. Since strategies could always be interpreted as new insights but this was not necessarily true of the inverse, I ultimately decided to collapse the strategies into the new insights category. I then proceeded with data condensation in the same manner as was described for research questions 1 and 2 above, deductively coding across relevant data sources for units of data that addressed new insights, strategies included.

In addition, however, the analysis of interview question 5d required comparing responses pre- and post-ROCI. To guide this analysis, I used the following analytic questions: What new perspectives, if any, are evident in the post-ROCI interviews and reflections? What qualitative differences, if any, are evident between the ways students discuss a given perspective pre- versus post-ROCI? This analysis resulted, for example, in the finding that, compared with their pre-ROCI responses, student teachers post-ROCI demonstrated a more nuanced understanding of the role that power dynamics play in schools and education reform. New perspectives and qualitative differences were noted in the margins of the interview memos and transcript segments and subsequently coded as a new insight in first cycle coding.

After first cycle coding was complete, I once again compiled all coded units of data into a data display and inductively pattern coded for themes within new insights.

Once I had identified a potential set of themes, I returned to the data display and primary data sources to see if themes were verifiable at the ground level and deductively search for any further units of data pertaining to identified themes. Themes were included in the

findings using the same parameters as were described above for research questions one and two.

CHAPTER FOUR:

ROCI IN PRACTICE AND STUDENT FEEDBACK

In this chapter, I report my findings for Study 1. The purpose of this particular study was two-fold: 1) to use the experiences of our inquiry group to illustrate what the ROCI looked like in practice and 2) to investigate middle school student feedback to better understand their experience with the innovation we developed (a student-driven social action project). To this end, Study 1 investigates the following research questions:

- 1. How did we as a group innovate to put AMLE middle school characteristics into practice in a way that is responsive to the needs and strengths of our middle school community?
- 2. What does middle school student feedback indicate about their experience with our innovation?

The first half of this paper is devoted to describing the work of our collaborative inquiry group as a means to illustrate what ROCI looked like in practice and the second half presents findings connected to the middle school students' experience.

Reform-Oriented Collaborative Inquiry in Practice

In this section, I address the first research question for Study 1. Since this is the first time the proposed ROCI model is being used, precisely how it is implemented in practice is also part of the findings. Drawing on all data sources from Study 1, I describe the activities in which we engaged as an inquiry group during each phase as well as the innovation that was concurrently developed and implemented in the participants' field placement classrooms. In so doing, I aim to provide a rich description of what ROCI looks like in practice to serve as a tool for others who aim to use collaborative inquiry for

such purposes. I begin by discussing the ways in which ROCI in practice was different than anticipated before describing the phases in detail. This section simply describes our activities in each phase; Chapter 5 delves more deeply into the experiences of the inquiry group throughout these phases.

Evolution of the ROCI Model

The ROCI model was originally envisioned as a cycle with the following distinct phases: 1) form and norm, 2) set reform-minded goals, 3) innovate, 4) adjust responsively, and 5) make meaning (see Figure 4.1). Although it was expected that there would be some overlap between phases, as we engaged in the inquiry process, it became quickly apparent that, in practice, ROCI was more iterative than linear and frequently required us to engage in multiple inquiry activities at a time. After developing our innovation, for example, we were often called upon to adjust responsively, which required us to revisit our innovation as well as our reform-minded goals. Likewise, far from being a final phase, we were continually engaged in "making meaning" throughout phases 2-3 as we strove to make sense of our experiences attempting to innovate.

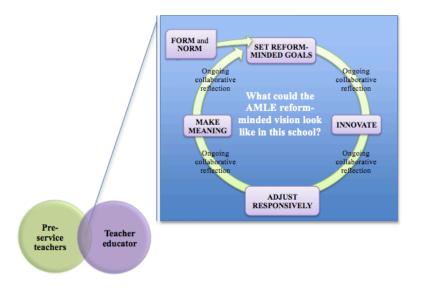


Figure 4.1. Original proposed model for collaborative inquiry

The iterative nature of our work, which called upon us to organically and flexibly employ the inquiry activities, was at first disconcerting since I had hoped to make sense of our progress in terms of the distinct phases. In retrospect, this back-and-forth is much more in keeping, however, with our commitment to being responsive to the needs of the students, school, and each other. The resulting ROCI model (Figure 3.1), which was described in Chapter 3, more accurately reflects our experience of engaging in collaborative inquiry.

Illustrative Example of Reform-Oriented Collaborative Inquiry

The following section consists of a description of how we used ROCI to create space for innovation while the four participants were student teaching in one field placement middle school. I describe collaborative inquiry group activities inside and outside of the middle school classroom, sharing teacher-created materials and student work to illustrate when relevant. In the description of our work, I make purposeful use of the pronouns *I*, *We*, and *Them*³ to indicate those tasks that I completed for the group, that were completed together, and that were completed by the student teachers respectively.

As has been previously discussed, ROCI is designed in such a way that it may be used in multiple contexts in which teacher education programs strive to support their student teachers in reform-oriented innovation. Our collaborative inquiry, as described and discussed in the chapters that follow, is intended to serve as an illustrative example. Since this iteration of ROCI takes place in the context of a middle level teacher education program, however, the reader will note that the particular nature of middle school and middle level education reform informs and is threaded throughout our work. In a different

_

³ Variants include *they* and *the student teachers*

context driven by another reform (e.g., bringing critical pedagogy into the high school English classroom), the characteristics of the individual school community and the principles that undergird the reform would undoubtedly result in a very different innovation and experience. Nonetheless, I hope that the description that follows will prove helpful for others who face similar challenges and aim to support reform-oriented student teaching facing related challenges and interested in similar goals.

A note regarding entry. During the summer preceding this work, I reached out to Mr. Plum⁴, the school principal, and our school-based university contact at LMS, Ms. Pat, to introduce myself and schedule a meeting to discuss the possibility of this research. I did not hear back to my initial inquiries or any subsequent ones, which may be explained by the summer timing. Our middle level program coordinator, however, was able to put me in contact with Ms. Pat at the end of the summer, who in turn assured me that she would discuss the prospect with Mr. Plum. Although Mr. Plum proved unreachable, Ms. Pat and I were eventually able to schedule a meeting a few weeks prior to the end of school. In this meeting, I provided a brief overview of Reform-Oriented Collaborative Inquiry as well as the intentions of the work. Ms. Pat was very supportive and assured me that she would secure the permission of Mr. Plum. Although I expressed my concern that I would not be meeting with him directly, Ms. Pat assured me that this was the principal's preferred arrangement and that she would be communicating our progress to the principal directly. I subsequently proceeded in applying for county research board permission and Ms. Pat proceeded in arranging classroom assignments.

-

⁴ All names are pseudonyms

Phase 1. During this first phase of ROCI, our inquiry group met two times in November to establish some norms and reflect on early field experiences, especially regarding the 16 characteristics of successful schools for young adolescents (See Appendix A). Building on this reflection, we also formulated a shared reform-oriented focus of interest and began to investigate possibilities by seeking input from middle school students.

Form and norm. In our first session in November, we met as a group to discuss the goals for collaborative inquiry and establish some basic collaboration norms. For our group, rapport building was not necessary due to previous experiences working together on collaborative projects in my class and during the summer focus groups. In addition, since our middle level teacher education program is a small one, all four student teachers had taken several courses together and participated in a field experience at this same host school prior to our meeting.

The group did, however, devote some time in this initial phase to making some decisions concerning logistics. We agreed, for example, to a timeline that consisted of launching whatever innovation we developed with a rough start date of sometime in early January (when students would be in their field placements full time) and ending sometime in late April, allowing for a little extra time prior to the end of their student teaching responsibilities. We also made a loose plan for meeting, anticipating that we would meet approximately bi-weekly at a combination of locations that included on the university campus, in their classrooms at their host school, and at other places off campus depending on the purpose of the meeting. For meetings in which we would need to discuss challenges and to trouble-shoot, we anticipated that an off-campus meeting might

be preferable, whereas planning meetings might be easier at the host school where students had ready access to key materials. Outside of our meetings, at this point we were communicating primarily by email and it was not until we entered Phase 2 that we created our Google folder and Google documents. In retrospect, however, I wish we had discussed this at the start as a means to establish communication and participation norms.

Early in this phase, I also made a point of underscoring the importance of the mix of perspectives in our group (teacher educator and student teachers in the field) and how I hoped this would enable us to consider both theory and practice. While at this point I was under the assumption that I would predominantly wear the reform-oriented theory hat and they would keep us grounded in practice, as will be described in this chapter, I often found that the opposite was true.

Make meaning. Drawing on some of the discussions that took place during preinterviews, we devoted an entire session in this phase to collaborative reflection on
AMLE's 16 characteristics, discussing the group's perceptions of the extent to which
individual characteristics were present in their classrooms and host school. Although the
student teachers were able to identify some evidence of "educators use multiple learning
and teaching approaches" as well as "varied and ongoing assessments advance learning
as well as measure it," the consensus among the student teachers was that they were not
seeing much evidence of the characteristics of successful middle schools that had been
emphasized in their coursework. As such, the conversation centered mostly on those
characteristics of which the student teachers wished they were seeing more. In discussing
these overlaps and gaps between the AMLE reform-oriented vision and their perceptions
of their field placement classrooms, we also devoted some time to discussing how the

students were making sense of these relationships, which are discussed in greater detail in Chapter 6. For the purpose of this section, however, it's worth pointing out that in an effort to keep the discussion from devolving into an oversimplified critique, the student teachers were challenged to consider factors that might contribute to the gaps they were perceiving. At this stage in our discussions, they speculated that these gaps were connected to the following factors: 1) competing demands placed on the teacher (e.g., raising test scores while providing remediation and enrichment for a wide range of students), 2) a restrictive curriculum, 3) a lack of teacher professional development centered on developmentally-appropriate characteristics of successful middle schools, 4) teacher perception of what students can handle, and 5) teacher self-efficacy in teaching techniques associated with middle school philosophy in particular (e.g., creating learning environments that promote active, purposeful learning).

Set reform-minded goals. The group's evaluations subsequently led naturally into a discussion of what they could envision as a possible reform-oriented alternative to what they were seeing. Noting an absence of family partnership activities, for example, one student teacher proposed surveying families to bring in parents as part of curriculum. The idea of developing a community-based learning project was also proposed for the first time. These evaluations and ideas were recorded in the inquiry group memos to be discussed in subsequent meetings.

In these sessions, we used the AMLE characteristics as an entry into discussing what sort of a reform-oriented innovation we could envision developing and enacting after the winter break. I challenged the group to consider not only which characteristics they felt were lacking at their field placement schools but also those in which they were

most interested and felt were do-able given their roles as student teachers. The group quickly identified with the five characteristics associated with Curriculum, Instruction, and Assessment (See Appendix A), explaining that they felt they had the most power to influence these. Although all of these characteristics were discussed, the group was particularly passionate about the following two: "students and teachers are engaged in active, purposeful learning" and "curriculum is challenging, exploratory, integrative, and relevant." I suspect this passion was due to the fact that these two characteristics were among the most heavily emphasized in the foundational course they took with me, yet were perceived to be largely absent in their field placement classes.

Although active, purposeful learning can take a variety of shapes in the classroom, the student teachers were especially eager to develop ways to engage students in what I have previously described as "hands-joined" learning (Association for Middle Level Education, 2012). The student teachers were thus interested in exploring ways in which "active, purposeful learning" could be used to give students a voice in the classroom. It was at this point that they first expressed an interest in using a student-driven project to engage students in making decisions about the content and process of their learning.

As it concerns the characteristic "curriculum is challenging, exploratory, integrative, and relevant," the group was especially interested in the issue of "relevance." The student teachers were confident that they could easily increase the relevance of classroom activities and were very excited to share ways they had already been experimenting with this characteristic in their field placement classrooms. Curriculum can be argued to be "relevant" in a variety of ways (e.g., relevant to common topics of interest to middle-schoolers, relevant to 21st century careers, relevant to a timely issue).

In this case, our discussions indicated that the student teachers were most interested in finding ways to create learning that would be of personal relevance, hoping to create a learning experience that the students would view as not only interesting, but also important to them personally. Ultimately, the group decided to move forward with the express purpose of emphasizing "active, purposeful learning" and "relevant curriculum," while acknowledging that other Curriculum, Instruction, and Assessment characteristics might also be bundled into whichever innovation they develop.

Since the group was beginning to consider what I perceived to be two of the most reform-oriented and challenging characteristics, I felt compelled to frequently emphasize the required delicate balance between our desire to be reform-oriented and our commitments to responsiveness and do-ability. I voiced concerns that the group needed to remember the limitations of their role as student teachers and that they should consider the scale of their innovation carefully so as not to overwhelm themselves, their mentors, or the students. I proposed examples of smaller scale innovations suited to their content area classrooms that also focused on active, purposeful learning (e.g., developing an interest project that ran parallel to the Science curriculum) as well as relevance (e.g., polling their students to get to know their interests and using the results to create relevant and authentic problems for the students to investigate in their Mathematics classrooms). As I advocated for scaled-down alternatives, however, I felt conflicted since I had been propagating this type of reform-oriented thinking in my course. Yet faced with the prospect of bringing these ideas to the field placement, I felt concerned when the students suggested whole-heartedly taking up these ideas. Although I had expected to experience the tension between theory and practice, I had not expected that I would need to be the

one to advocate for do-ability. In hindsight, I should have expected this since I purposefully selected reform-minded student teachers for this project. In this tension, I was unclear exactly what was too innovative and what was reasonably do-able.

Ultimately, the group nonetheless decided to target these two characteristics by experimenting with a student-driven project borrowing from community-based and service-learning pedagogies that were explored in my course. Despite my own enthusiasm for these approaches, I found myself once again re-emphasizing scaled-down alternatives, underscoring the impending stress of student teaching and other program requirements, including coursework and edTPA. I found this turn of events to be particularly interesting since, as part of my role as the teacher educator in the group, I felt it was important to allow the interests of the student teachers to guide the ROCI innovation. Although service learning is something emphasized in my course, I entered ROCI fully expecting that the group would develop an innovation that was completely outside this pedagogy. In other words, I did not advocate for this approach. Nonetheless, in retrospect I realize that there was perhaps a presumption on behalf of the student teachers that service learning was a natural fit for our collaborative work since it was something with which we had all developed some prior experience. I worried that it was likely too large a venture for student teaching but the student teachers were insistent. I was eventually inspired by their passion, however, to agree that a student-driven project would be a compelling fit for their interests and perceived school possibilities. And after all, what message would I be sending if I insisted they not experiment with precisely what we had been learning about in class?

Phase 2. In this phase, we developed and implemented our innovation, engaging in all four inquiry activities as needed throughout. This phase was the longest in duration and stretched from December to May. We met twelve times, approximately twice per month, at a variety of places, including on campus, the field placement school, a favorite restaurant near the school, and one time at my house for an extended planning period and lunch. Communications within the group increased considerably during this phase and as the group was called upon to adjust responsively, we also began communicating between meetings via phone conferences and group text messages as needed. As we moved through Phase 2, we simultaneously and iteratively employed all four research activities (innovate, adjust responsively, maintain reform-oriented focus, and make meaning) as needed. Capturing this type of iterative work in writing presents a particular challenge since describing the back-and-forth can be confusing to the reader. A linear description, on the other hand, runs the risk of oversimplifying. I have thus decided to begin with a chronological description of our inquiry group work as well as, once launched, the middle school students' engagement in the student-driven project. For the sake of clarity, I describe Phase 2 in two parts: Part 1: Developing the Project and Part 2: Implementing the Project. When useful in illustrating what we did, teacher-created materials and student work will be shared. Although the research activities are naturally described throughout, I end the section with a summary of how we used each of the research activities in Phase 2.

Part 1: Developing the innovation. As a means to develop something that was reform-oriented and responsive, we wanted to ensure that the middle school students and our school-based contact were given an opportunity to provide substantive input and

feedback. *Developing the innovation* thus consisted of fleshing out the innovation and seeking input. Then, with input in mind, we planned for the implementation of the innovation.

Fleshing out the innovation and seeking input. Having decided in Phase 1 that our innovation would center on a student-driven project, we began loosely envisioning how this might work, thinking about logistics, possible challenges, and next steps.

Simultaneously, we also investigated student interests as a means to identify a focus for the proposed student-driven project. Our inquiry group meetings were thus guided by the following questions: 1) What shape might our student-driven project take if we are aiming for relevance and active, purposeful learning?, 2) How might we need to be responsive to this particular school and community?, 3) How will we know if our innovation is successful?, and 4) What do we need to do to get started?

In discussing the first of these questions, the group ultimately decided to use the IPARDC (Investigate, Plan for action, Act, Reflect, Demonstrate/Celebrate) process commonly used in service learning as an initial framework for our student-driven project (National Youth Leadership Council, 2013). Having learned about this approach to teaching in my course, the inquiry group had already developed an understanding of the ways in which the IPARDC process can target key characteristics such as "active, purposeful learning" and "relevant curriculum." As such, it was a natural fit for the reform-oriented goals they had identified and presented an exciting prospect since the group was eager to experiment with bringing this pedagogy to life in an actual classroom.

Since this pedagogy represented a departure from the prevailing modes of teaching and learning in their field placement schools, much thought and discussion was

devoted to considering how we might adapt this pedagogy to suit the constraints and opportunities evident at their given school. We were particularly sensitive, for example, to what the group perceived as pressure to adhere closely to the newly adopted common core curriculum and prepare students for the annual standardized test. For this reason, the group proposed that, experimenting with this sort of a student-driven project might be best suited to the 45-minute period referred to as Intervention/Enrichment (I/E). Since the use of this class period varied greatly across teams and teachers, ranging from study hall to test preparation to clubs, the group anticipated that there would be little issue with them using this time as a space to innovate. Also, as part of our commitment to responsiveness and workability, we decided to write up a brief proposal to share with the mentor teachers and our school-based university contact for the express purpose of receiving their input and feedback.

The group also decided to obtain student input as a means to inform the selection of the project focus. This was a purposeful move to aim for relevance and maximize the potential for their middle school students to engage in active, purposeful learning. In each of their I/E classes, the student teachers facilitated a whole class discussion concerning the following prompts: What issues concern you personally? What issues concern you in your community? What issues concern you in the world? Building from this discussion, each student teacher then collected individual student responses to the prompts, analyzed these for themes, and brought these themes to the next inquiry group meeting. Upon comparing themes across classes, there were several points of overlap, many of which related to student concerns regarding a lack of community in their school, frequent negative rather than positive interactions among students and teachers, as well as

a general desire to change something about their school to "make it more fun" (e.g., getting rid of school uniforms, making lunch less stressful, less yelling and more positive discipline, less time spent on test preparation). These student concerns also echoed the excerpted findings from the "Positive and Nurturing Environment" section of the Lakeview Middle School's publicly published School Climate Survey displayed in Table 4.1.

Table 4.1. Student Data excerpted from 2013 School Climate Survey		
		Percent
	Number	Responding
Survey Item	Responding	Positively
I believe my teachers care about me as a person.	345	69.6%
The students in this school get along with each other.	342	33.3%
I like going to school here.	345	74.5%
Teachers treat students with respect.	347	63.4%
Students show respect for the teachers in this school.	342	50.6%
My teachers often say positive things to me.	340	74.4%
Students in this school are rewarded or recognized publicly for good	345	64.1%
behavior.		
I feel like I am an important part of the school community.	339	57.8%

Drawing on this student input, the group decided to engage the students in a social action project driven by the following essential question: *How can we promote a positive school culture in our school community?* The phrasing of the question was carefully crafted to emphasize the desire to promote something positive, rather than highlight student dissatisfaction in specific areas. Additionally, the purposefully broad nature of this question was intended to allow individual students and groups to explore a wide range of issues concerning school culture. Our hope was that this would allow students to ultimately pursue issues they were particularly passionate about, once again maximizing opportunities for relevance and active, purposeful learning via decision-making about what to investigate. Since the importance of a positive school culture is explicitly

addressed in the AMLE vision of successful schools, this also presented a unique opportunity for the group to take up the challenge of an additional characteristic related to culture and community: "The school environment is inviting, safe, inclusive, and supportive of all" (See Appendix A).

Parallel to our efforts to seek input from the middle school students, the student teachers also sought the input of their mentor teachers and other teachers on their team regarding which standards they thought the students could benefit from reviewing, especially in the tested subjects of math and English language arts. This was a strategic move to develop a project that would be both student-driven and in keeping with the academic goals and needs of the students. Through these conversations, the group was able to identify that across subjects, teachers felt that students could benefit from additional experience with making an argument and supporting it with evidence. Notably, this is a popular emphasis in this era of high-stakes testing accountability and the common testing genre referred to as the "constructed response." Nonetheless, the group could see the importance and relevance of these sort of evidentiary reasoning skills to many life situations and could also see how it could naturally fit across the various phases of the IPARDC process. An emphasis on these skills is also evident in Maryland and Common Core standards such as these:

- CCSS.ELA-Literacy.W.8.1 Write arguments to support claims with clear reasons and relevant evidence
- Standard 1.0 Skills and Processes C.1 Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.

With this in mind, the group agreed that collecting evidence, drawing conclusions, building an argument, and supporting this argument with evidence were all skills that could naturally be revisited and applied to a relevant context, through the social action project.

At this stage, we also began to engage in some initial brainstorming regarding how we might evaluate the success of our innovation. Again, we revisited the two characteristics we were aiming for, discussing the aspects of each that we were most interested in exploring. This led us to the following two questions: 1) How would we know that we were successful in creating "relevant curriculum," which we were defining as learning experiences that students viewed as important to them?, and 2) How would we know if we had been successful in engaging student in active, purposeful learning, which we were defining as "hands-joined" learning? Since both of these characteristics are tied to student perceptions of their learning experiences rather than their acquisition of a given set of knowledge, we struggled at first to determine what we could accept as evidence that our innovation was successful. The group began by envisioning assessments that would capture what students learned through the project and the student teachers were quickly able to brainstorm a variety of authentic assessments that could be used to demonstrate new learning (e.g., learning portfolios, presentations, demonstrations, etc.). Since we wanted to receive specific feedback concerning student perceptions, however, we determined that student feedback in the form of structured reflections (during and after the project) would also be necessary, although we did not develop these reflections until the project had taken shape later in Phase 2.

At this point, we felt we had a strong enough sense of our proposed innovation to draft something to share with the mentor teachers and our school-based university contact, Ms. Pat. Since we were committed to engaging the students in each step of the IPARDC process, which precluded scripting every step, we decided that the best we could do was draft up a loose overview of the IPARDC process as it applied to the project focus (See Figure 4.2). To accompany this overview, the student teachers also created a project map in which they identified activities and interdisciplinary standards that we anticipated would be embedded in various phases of the project (see excerpt in Table 4.2).

Opportunities to target several standards were naturally built into the "investigate" phase.

Developing and conducting a "school culture" survey, analyzing results, and drawing conclusions to inform their proposals, for example, addressed numerous math and science standards.

How can we promote a positive school culture in our school community?

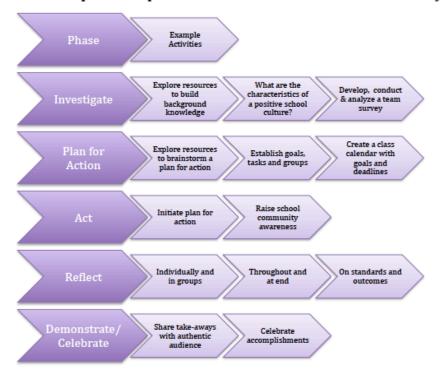


Figure 4.2. Loose overview of IPARDC to share.

As a means to share and seek input on our plan, we arranged a meeting to discuss and share these documents with Ms. Pat. Three of the four student teachers were present at this meeting and took the lead in sharing their vision. They explained the reformoriented characteristics for which they were aiming, the input they had already collected from students, and walked through the phases of their loose overview. At this time, we also identified the ways in which we were anticipating certain standards would be addressed in each phase of the IPARDC process, emphasizing the standards that had been identified as important by mentor teachers.

Table 4.2 Excerpt from Project Map		
Phase: Investigate		
Example Topics/Activities	Standards Addressed	
Research and discuss "positive school culture" and share what is learned through research Identify/develop and conduct a school culture survey	Standard 6.0 Social Studies Skills and Processes C.2 Identify a situation/issue that requires further study, D.1 Identify primary and secondary sources of information that relate to the topic/situation/problem being studied.	
	Standard 1.0 Skills and Processes A.1 Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.	
	CCSS.ELA-Literacy.W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. (For 7th graders)	
Compile results and through discussion, draw conclusions	CCSS.ELA-Literacy.SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.	
Brainstorm ideas and seek input	Standard 1.0 Skills and Processes C.1 Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.	
	Standard 6.0 Social Studies Skills and Processes D.2 Engage in field work that relates to the topic/situation/problem being studied.	

Through conversation, Ms. Pat presented herself as an ally of the goals of this work and was enthusiastic about the focus of the social action project. From this meeting we were able to learn about a variety of previous and ongoing school efforts to promote a

positive school culture. We were also able to gain insight into the internal politics and organizational structure of the school from this meeting, which helped give greater context to the work we would be doing and was our introduction to what would prove to be one of our greatest challenges in this work---navigating school politics. This is discussed in detail in Chapter 5.

In this meeting, Ms. Pat was also able to provide us with some logistical and strategic suggestions. For example, we were already concerned that the pressure to use the I/E block for test preparation would create a conflict, particularly as we approached the high-stakes testing window in April. Ms. Pat suggested that we take advantage of the school's alternating A/B schedule to propose that A days could be used for intervention (test preparation) and B days could be used for enrichment (our social action project). This compromise, which we took readily, made the proposed project feel more do-able to the mentor teachers and assisted us in coming up with a reasonable pacing map for the project that was informed by other constraints. Based on this input, the student teachers then shared the loose overview with their mentor teachers, proposing the compromise that the project be emphasized in B days only. As predicted, all four mentor teachers approved of the proposal and, as such, we proceeded into planning.

This meeting also led into a discussion regarding do-ability, particularly given the bold undertaking of the inquiry group. Ms. Pat reminded the group that while it would be unrealistic to believe that they could completely change a school's culture by initiating one project over a few months, they could empower students to develop some proposals and get the ball rolling on a few of these. This sentiment echoed discussions we had

already engaged in as a group and served as a valuable reminder that we should dream but we should also set realistic goals.

Planning for the implementation of the innovation. Having received input and the green light for our proposed social action project, we set aside a block of time for planning. This time was strategically scheduled in January so that we could prepare some essential teacher-created materials prior to what the student teachers referred to as their "full takeover" of their field placement classes. In this meeting, we reviewed the loose overview, reminding ourselves of the AMLE characteristics we were aiming for as well as the various skills (making an argument, supporting a claim with evidence, etc.) we were intending to bundle into the project. We then used the county-wide academic calendar, the student teaching calendar, and a blank planning calendar to create a pacing map that identified an anticipated end date for our innovation, working backwards to count the number of "B days" with we would have to play. After that, we roughly estimated how many days would be necessary for each phase, presuming that investigating and planning would take the bulk of the time and overestimating as much as possible to allow for wiggle room. In the end, we estimated that there would be approximately 30 available B days between the start of the project mid-January and the first week of May, which is when we needed to be finished. This 30 day total also took into account the expected interruption in project work in the month of March due to standardized testing.

Our commitment to engaging students in decision-making at each phase of the IPARDC process meant that we were unable to develop a prescriptive unit plan from start to finish. Instead, we continued to build out from the overview we had developed,

estimating how long each of the core activities in each phase (e.g., exploring resources, brainstorming, taking action) might take. Bearing in mind that each class period was only 40 minutes long and that we were only using designated B days, this was a considerable reality check, forcing us to again discuss do-ability and manage our expectations concerning what we could reasonably aim to achieve with the time we were given.

Driven by the essential question *How can we promote a positive school culture in our school community?* we were able, however, to envision a relatively concrete plan for the "investigation" phase of the social action project. At this point, the group agreed that while all four teachers would aim to follow a similar pace and complete some common activities, there was no expectation that the exact approach and daily lesson be uniform across teachers. While we did want the students to develop and conduct a school culture survey to be used in all four classes, for example, each student teacher had a different idea for how they wanted to launch the idea of the social action project with their students. This resulted in, once again, a flexible plan for the investigation phase, which involved some shared activities and deadlines as well as some designated days labeled with loose goals (i.e., "launch the project by getting students excited and explaining IPARDC").

Since one of the express goals of the investigation phase is to explore the essential question through a variety of sources, it was necessary to identify some resources for students and the student teachers to explore. While the student teachers had been seeking student and mentor teacher input, I had been doing some initial research to identify possible resources that might interest the group and their students as they investigated a term as broad and nebulous as "positive school culture." Having sent an email with a narrowed down list of links to explore, we spent some time in a planning session

exploring and evaluating relevant literature tied to the AMLE characteristic "The school environment is inviting, safe, inclusive, and supportive of all." Among other websites, we were particularly inspired by resources available at the following: <u>Association for Middle Level Education</u> (2014) <u>The National Forum to Accelerate Middle-Grades Reform</u> (2014), and <u>The Institute for Democratic Education in America</u> (IDEA) (2014).

After this planning session, a big picture view of the IPARDC process as well as a draft of the plan for the "investigation" phase was subsequently posted by one of the student teachers to a shared Google document for everyone to view, comment on, and reference as they began to launch the innovation in their classrooms. An excerpt of the eventual final plan for the investigation phase is provided in Appendix L.

Part 2: Implementing the innovation. In the third week of January, all four student teachers launched the social action project with their students. In keeping with the IPARDC process, the project moved through several phases, although in similar ways to what we experienced with ROCI in practice, the process was even less linear than we had expected. As students and student teachers developed ideas and received input, they often moved back and forth between planning, investigating, and acting. Likewise, reflection took place throughout as well as at the end since the students completed two mid-project reflections as well as a final summative reflection. Students were also called upon to critically reflect at each phase, particularly as they received critical feedback in response to their proposed ideas. To capture this, the following description of how the student teachers implemented the social action project with their students has been divided into three sections: 1) investigating the essential question, 2) developing proposals, planning, and/or taking action, and 3) reflecting and celebrating.

Investigating the essential question. The official kick-off for the social action project took place in each student teacher's assigned enrichment periods. On the first day, each student teacher introduced the essential question, How can we promote a positive school culture in our school community?, emphasizing how the project they would be engaging in together was rooted in the input the students had previously provided. The student teachers also presented an overview of the sorts of activities they hoped to engage students in (guided again by the IPARDC process), underscoring the ways in which the students would be involved in decision-making regarding what to propose as well as how to propose and, in some cases, enact the ideas they developed. To get the students excited and thinking about how they can work together to, as they put it, "make something awesome" at their school, the student teachers showed a brief YouTube video entitled Pep Talk from Kid President to You (2013), using this as an entry into a discussion about what they thought it would take to create meaningful change in a community.

In this phase, the student teachers also came up with the idea of beginning each project meeting with inspirational quotes they had identified related to the work of "social action." Some examples included:

"If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him...We need not wait to see what others do." - *Gandhi*

"Ideas must work through the brains and arms of good and brave men, or they are no better than dreams." -Ralph Waldo Emerson

"Man's mind, once stretched by a great idea, never regains its original dimensions." -Oliver Wendell Holmes

These quotes were shared at the start of each project meeting and often followed by a brief discussion.

Having launched the project, the student teachers transitioned into having the students explore the idea of a "positive school culture," engaging their classes in a combination of 1) individual and small group reflection on what the term meant to them, 2) online research using the key term "positive school culture," and 3) initial brainstorming concerning how the class could promote a positive school culture. Students at this stage began to propose a multitude of ideas, many of which were rooted in their desire to give input on aspects of their schooling (e.g., lunch room policies, school uniform policies, discipline systems, scheduling). A few students also expressed frustration that Lakeview Middle School did not have a formal elected student government or voluntary student leadership club, although we later learned that there was something called a "student leadership team" through which students were nominated by teachers to participate in focus groups of sorts.

At this point, the student teachers felt it was important to challenge the students to collect data to inform their next steps, engaging their students in a discussion of the role data can play in argumentation. Much of the students' initial input had centered on issues concerning student voice in the school. For this reason, the group decided to share a survey with the students from the Institute for Democratic Education in America (IDEA) entitled *What's Happening At Your School?* (2013). Exploring the survey together, the student teachers and students identified the ways in which the tenets of democratic education encapsulated many of the characteristics of "positive school culture" they had been discussing. To inform their next steps, students in each class completed the survey

anonymously and were then challenged to think about how they might go about compiling the results. In the end, each class came up with some variation of anonymous tallying. After tallying was complete, classes discussed the findings and were asked to identify compelling findings from these data (e.g., What do the data tell us about our school culture? Which items do you think are most revealing/interesting? Which results might we use to address next steps?). The student teachers then shared the summary tally results from their classes with one another, looking for trends across classes.

Informed by these data, each class then returned to brainstorming, compiling specific ideas into what they referred to as a "dream list" of ideas to promote a positive school culture in their school. If individual students or small groups identified ideas they felt were particularly interesting, they were encouraged to explore that idea more deeply, seeking online resources and the input of others in the class to help them flesh out their ideas. As students developed concrete ideas, the student teachers circulated and facilitated discussions in class regarding do-ability and perspective taking, challenging them to think critically about why certain rules were in place and why certain ideas might not be do-able. Students also frequently challenged one another to re-think ideas that were too "out there," too radical. The debate surrounding school uniforms in Ray's class, for example, was particularly lively and dialectic. While some students wanted to propose that school uniforms be done away with entirely, other students did not think the school leadership would be open to this. As a result, a discussion ensued regarding the rationale for school uniforms as well as possible compromises they might propose to address some of the concerns of school leadership.

At the end of the investigation phase, each class compiled their ideas into a master list to share with the other four classes. On a designated day, representatives from each class were assigned to the other three classes and time was set aside for sharing across classes. At this point, a school administrator, referred to herein as Ms. Jones, who had expressed an interest in the work was also invited to listen to some of the students' ideas during this sharing session. She readily agreed and, at the last minute, chose to invite the school principal, Mr. Plum, to join. Unfortunately, Mr. Plum had a very limited understanding of the big picture of the work in which we were engaged and was quick to criticize the ideas presented by the groups in the sessions he attended. In one class, the student teachers reported that he even went so far as to take over one of the sharing sessions entirely, launching into a stern lecture concerning the bad behavior of students and failing grades. Nonetheless, the sharing sessions did present an opportunity for students to compile ideas across classes and a master "Dream List" was created that represented all of the ideas. (See Table 4.3.)

After the sharing session, I received a call from two of the student teachers, Danni and Ray. They were understandably distressed and felt unsure how to follow up with the principal. They also wanted advice in how to address this experience with their students, many of whom were visibly upset by the principal's response. We agreed that the best course of action would be to spend the next class session debriefing with students and follow up with the school principal to clarify our work, seek input, and listen to concerns. As such, in the next project meeting, the student teachers gave the students an opportunity to share their concerns and the student teachers made a point to 1) honor their experiences, 2) reassure them that they were not in trouble and that tension and

Table 4.3				
"Dream List" of Student Ideas for Promoting Positive School Culture				
Idea/Goal Specific possibilities				
School Uniforms	 Last week of school- no uniforms Student-designed T-shirts Khakis but you choose your top Incentive program to earn a free dress day Coupons on Monday AM based on previous week's grades/behavior Pay coupon on Friday to get a free dress day 			
Class Selection	 More choices for creative arts and career readiness courses Enrichment choices across whole school Introducing an advisory/morning meeting to build relationships between students and student-teacher relationships 			
Student Voice	Student leadership group/club that meets with the administrators			
More locker time	Time to go to lockers between classes and before/after lunch			
Lunch	 Line up by first class that gets there Get there first, exit first No cutting time short Music Sit where we want and be permitted to socialize 			
Positive reinforcement	 Phone calls for good behavior Bring back token system for positive behavior (e.g., coupons redeemable at snack line) Quiet transitions for a week=homework pass Grade level "pick-your-party" 			
Spirit Week	 Theme days Twin day What you looking at? Day Pajama day 90s day Dress your best day Celebrity day Favorite color day Activities Deck the Halls School dance Random acts of kindness Music in the cafeteria Student-teacher basketball game 			
Teacher Appreciation	 Teacher Appreciation Week Positive comment cards during Teacher Appreciation Week Throughout the year, profile and commend exceptional teacher allies with an announcement, banner and certificate 			

misunderstanding is an expected part of changing the status quo, 3) respect the principal's perspective, explaining that he did not fully understand the work they were doing yet, and 4) assure them that they would follow up with Mr. Plum to clarify before proceeding. Notably, from this point on, the student teachers strategically acted as the go-between or buffer between school administration and the middle school students. For better or worse, student ideas were subsequently communicated to administration by the student teachers, who served as advocates for the middle school student perspective. This was a deliberate move to guard against further negative interactions between the school principal and the middle school students.

Since it was now the end of February and days away from the start of the standardized testing window, the student teachers explained that they would be using this project break to follow through on these items in the hopes that we could move on to the next phase of the project after testing. As one last activity prior to testing, the students completed a brief reflection on their experiences with the "investigation" phase of their work. Prompts for this reflection were first developed in an inquiry group meeting and then subsequently revised via a shared Google document. Students were asked:

- How do you feel about the goal we have identified for our project?
- Have you found our investigations useful so far? Why or why not?
- What has been your favorite part of this phase? Why or why not?
- What has been your least favorite part of this phase? Why or why not?
- What has surprised you so far?
- What do you think we should have done differently?

This student feedback was subsequently discussed in an inquiry group meeting and used to inform next steps.

The student teachers then decided that the best strategy would be for them to meet with the school principal to share the IPARDC overview and student "dream list," seek his input on proposed ideas, and serve as advocates. Given the stressful nature of the student sharing session, although we debated inviting a few student representatives to join us in this meeting, we eventually opted not to. Since the testing window is understandably a busy time, scheduling such a meeting was difficult to do. In the end, the principal's secretary who, we happened to learn, had also been thinking about organizing a Spirit Week, was able to secure a 40-minute time slot in the last week in March. From this meeting, in which both the principal and principal's secretary were in attendance, the student teachers were able to gain useful insight into the history of various initiatives at their school as well as the current political context within which the school was operating. Based on this discussion, some student ideas were deemed un-doable by the principal (e.g., any changes to school uniforms), others were explained as potentially problematic (e.g., shifting class selections, adding locker time), and the remaining ideas were given the green light. The group also first learned of an upcoming school-hosted "Community Day" and were invited to engage students in helping to organize this event. In the end, the group was given permission to move forward with the following ideas:

- 1. Helping to organize a Spirit Week
- 2. Helping to organize a Teacher Appreciation Week
- 3. Helping to organize Community Day
- 4. Developing an advisory program proposal

- 5. Developing ideas for a student leadership club
- 6. Developing ideas for a positive behavior system

Since the classes could now begin to develop their proposals and start planning to launch some of these ideas, we moved into making rapid preparations for the next phase.

Developing proposals, planning and/or taking action. In the final B day of March, having received the green light on five proposed ideas and one new one, the student teachers reported back to the students and worked together to determine how to proceed. Students were very excited to hear about the prospect of Spirit Week in particular. In their meeting with the school principal, the student teachers had been informed that the principal's secretary had already designated the week prior to spring break (second week of April) as Spirit Week. Although this was less than ideal, the group was told that the dates were non-negotiable and so they launched directly into some intense Spirit Week planning. Luckily, since this was after standardized testing, three of the four mentor teachers were open to having both A and B days devoted to project work. Each of the classes were subsequently assigned a chunk of the planning, which included 1) deciding on daily themes for Spirit Week dress-up, 2) helping to orchestrate a Deck the Halls activity, 3) creating posters and flyers, and 4) advertising and communicating key details to other teachers and students (See Figures 4.3 and 4.4 for example artifacts.)

Throughout planning, student teachers worked closely with the principal's secretary, filling her in on the status of student progress and communicating new ideas back and forth. The principal had a specific vision of a "college-readiness" focus for the Deck the Halls activity, for example, which was thus orchestrated by the student teachers and students as a compromise. In brief, it consisted of each team researching a designated

college and visually displaying what they learned about each school in the team's hall. The idea was that designated students, student teachers, and school administrators would judge the displays and announce one team per grade level as the winner and recipient of a "block party" in the courtyard during an I/E block the following week. While the student teachers voiced some philosophic concerns regarding the use of a competition to promote positive school culture, they ultimately conceded and the activity moved forward as planned.

Teachers,

Please be sure that the students know the days and events during Spirit Week. Please tune in regularly for the 10:30 announcements to receive additional information about the events throughout the week.

Spirit Week Schedule

Monday: Twin/Triplet/Quadruplet Day

Pick a person or a group of friends and dress exactly the same.

Tuesday: Bama Day

Hat day, Crazy hair day, Mix and match day, and Opposite day all mixed into one.

Wednesday: Career/Dress Your Best Day

Dress to impress!

Thursday: Team Day

Rock the team gear of your favorite college or professional sports team.

Friday: Color Day

Just a touch or go all out! 8th- Blue, 7th- Red, 6th- Yellow

Figure 4.3. Spirit Week flyer for teachers.

During planning, Danni was also called upon to advocate for the students as some of their favorite daily Spirit Week themes were revised by the front office. Although hesitant to push too hard, Danni felt compelled to communicate the students' perspective and see if a compromise could be reached. As a result, one of the students' favorite themes (twin day) was reinstated after originally not making the officially approved list.



Figure 4.4. Student-created posters to advertise for Spirit Week.

Spirit Week itself was an exciting time for the student teachers and students alike. Student reflections completed after Spirit Week clearly illustrate this excitement, using words like "joyful," "happy," "cheerful," "fun," and "funny" to describe the week. Students also reported that they felt "more trusted" and "free." Likewise, the student teachers were thrilled to see Spirit Week come to life. Bobbi shared, for example, that "The highlight for me was just standing in the hallway first thing in the morning and seeing how excited all the kids were to be twinned up." Danni also texted me mid-week to let me know "They're [The students are] pumped. They have been playing music on the announcements too!" This excitement was no doubt bolstered by the fact that three of the four I/E classes involved in the project were announced as winners of the "Deck the Halls" competition and subsequently received a block party for their class. The student teachers also unanimously agreed that the school dance, which took place on the Friday,

was among the most memorable and joyous moments of their student teaching experience, describing with enthusiasm a moment in which all of the students encircled the school principal and danced around him.

In late April, after the excitement of Spirit Week and spring break, the inquiry group decided to use the remaining time (which was rapidly slipping away) to reorganize the students in all four classes into four interest groups, each focusing on one of the most popular approved dream list ideas. This resulted in the following options:

Option 1: Learn about, propose ideas and help organize Community Day

Option 2: Learn about, propose ideas and help organize Teacher

Appreciation Week

Option 3: Learn about the existing student leadership team and put together a pitch for how our school can build on this next year

Option 4: Learn about the previous positive reinforcement/reward system and put together a pitch for how this could be expanded next year

Students completed a form in which they indicated their order of preference for the four options and student teachers met to compile the results and create new student lists. Since a large number of students selected Option 1 as their top choice and very few selected Options 3 and 4, the group decided to have two classes focus on Community Day (Option 1), one class focus on Teacher Appreciation Week (Option 2), and then collapse Option 3 and Option 4 into one class. On designated I/E periods, students reported to the classroom assigned to their interest group. What follows is a brief description of how each interest group proceeded.

Teacher Appreciation Week. The group of students responsible for learning about, proposing ideas, and helping to organize Teacher Appreciation Week (Option 2) met in Ray's classroom and ultimately completed the following activities:

- developed ideas for showing teachers appreciation
- came up with a plan to collect and share positive comments about each teacher
- distributed comment sheets to all classes, gave instructions, and collected comment sheets back
- sorted through all comments, ensuring they were appropriate
- organized each teacher's comments and delivered them to teachers on a designated day

Since this was a new and rather large undertaking, this group was challenged by some unexpected logistical problems and engaged in a great deal of trouble-shooting.

Collecting comments on all teachers, for example, resulted in a tremendous amount of paper to sort through, ultimately resulting in some students collecting and others forming an assembly line of sorts to review each comment and organize them into piles. Likewise, the group had not anticipated that there were three teachers with the same name and since the students did not indicate their team, tracing comments back to the correct teachers was a challenge that in some cases, proved impossible to overcome. Since this interest group's work was time sensitive and the work of organizing took much longer than anticipated, some of the students in the Community Day group were also enlisted to help. Nonetheless, the students were able to complete the task (with a few students and student teachers volunteering additional time throughout the day) and received many words of thanks from the teachers.

Community Day. Although this was the most popular event selected by students, resulting in the largest group of students spread across two classes (Danni and Charlie), the group was unfortunately met with one challenge after another. As has been mentioned previously, student involvement in Community Day developed from the student teacher meeting with the school principal and principal's secretary. Students were invited to help plan activities for the upcoming event that was to be hosted at the middle school. The contact information for the community event organizer was shared with the student teachers, who eagerly reached out to find ways that the students might be involved. This person proved extremely difficult to get in touch with, however, and failed to turn up for the in-person meeting that was scheduled to discuss the event. In the meantime, student teachers supported students in brainstorming possible activities for the event, eventually fleshing out a plan for an idea they were especially excited about---a teacher v. student basketball game. In the midst of this brainstorming, however, the student teachers received the disappointing news that the event had been moved, at the request of the community event organizer, to another location several miles from the school. While they attempted once again to find a way for students to be involved, the combination of the shift in location, the lack of communication, and the rapidly disappearing time left in student teaching resulted in the work of students being reduced to advertising for the event by creating and hanging posters around the school. Students and student teachers were understandably frustrated by this change of events.

Student leadership and positive reinforcement. This interest group was by far the smallest, consisting of 15 students, and was purposefully placed with Bobbi, who was working with a mentor teacher who had expressed an interest in initiating a student

government and/or revitalizing the school-wide positive behavior incentive system.

Unfortunately, the students who had intended to develop a proposal for a positive reinforcement/reward system, struggled and lost focus. Bobbi found it increasingly difficult to motivate students to remain on task and create something concrete. Although some students continued to investigate ideas and the mentor teacher offered input occasionally, they ultimately failed to propose a coherent vision.

A small group of five students, however, was committed to wanting to develop a proposal for a student leadership club of some sort, which in the end they hoped would continue to advocate for some of the other ideas that remained on the dream list. As they worked, Bobbi provided this group with scaffolded support, assisting them in organizing some of their ideas in writing and challenging them to think through not only their rationale but also the specifics (who? where? when? what? how?) as much as possible. The students ultimately decided to propose a weekly after-school club they named the Society of United Leadership (S.O.U.L.), which they envisioned would engage students in continuing the work of promoting a positive school culture while learning valuable leadership skills. Bobbi assisted them with organization and served as an editor for their final product. The resulting proposal was a two-page document with subheads such as "Why we want S.O.U.L.," "Who will be in S.O.U.L.," and "What will Lakeview Middle School (LMS) S.O.U.L. do?" (See Appendix M for full proposal.) Due to time constraints and scheduling conflicts, the proposal was ultimately shared, on behalf of the group, by Bobbi with another teacher who had previously expressed an interest in running a leadership group of some kind. At the end of data collection, discussions concerning how to start this club for next year were ongoing and next steps remained up in the air.

Reflecting and celebrating. By the time all three groups had completed the work described above, it was the second week in May and, despite our original intentions, we found ourselves nonetheless wrapping up the project during their last mandatory week of student teaching. For this final phase of the project, all students returned to their original IE block classrooms to reflect. Although critical reflection and student feedback had been a central part of each phase of their work, the students were now asked to reflect back on the whole social action project by way of a final reflection. (See prompts in Appendix G) Prompts were designed to capture student experiences and feedback regarding the overall experience of the project as well as their perceptions regarding the extent to which they felt the work was successful in the goals of 1) giving them a voice in their school, 2) making a difference in their school, and 3) giving them an experience that was important (proxy for relevant) to them. Findings associated with these final reflections are described in Phase 3 below.

On the official last day of the project (during the week after student teaching was officially over), all student teachers met with their original IE block for a popsicle party and award ceremony. Each student was called up to the front of the class and formally awarded a certificate for their participation in the hard work of promoting a positive school culture. Three additional awards were also given to students for exceptional contributions in the following categories: 1) most creative ideas, 2) leadership, and 3) enthusiasm and dedication. As a closure activity, while students enjoyed their popsicles and socialized, they were also asked to write one memory or lesson they would always remember onto a banner that was displayed in the classroom.

Summary. To conclude the description of Phase 2, I offer four brief summaries of how we engaged in each of the inquiry activities in this phase.

How did we "innovate"? The inquiry group innovated in multiple ways. First, they developed and implemented a social action project that was uniquely driven by issues that were of concern to the students they were teaching. In so doing, they made use of the flexible I/E period in a new way and created a variety of novel learning experiences and teaching materials. Additionally, they emphasized two reform-oriented AMLE characteristics that were not perceived to be evident in their field placement classrooms: 1) active, purposeful learning and 2) relevant curriculum. Through the social action project, they innovated by bringing these characteristics to life in the classrooms in which they were teaching. Considerable overlap exists among these characteristics since, as one of the student teachers asserted, "active, purposeful learning can be used as an entry to relevance." Since the essential question for the social action project (How can we promote a positive school culture in our school community?) was selected by students, the student teachers were also challenged to learn about "positive school culture" alongside the students. The "dream list" in this project, for example, was generated as students and student teachers jointly explored various resources and data. Additionally, as students moved from exploration (or "investigation") to creating a plan, they were involved in strategic decision-making concerning next steps. In this way, students and student teachers were engaged in active, purposeful learning around a question that was of immediate *relevance* to them.

How did we "adjust responsively"? In every phase of this project, the inquiry group met regularly to discuss progress, trouble-shoot, communicate with key

stakeholders, take feedback into consideration, and make responsive adjustments as needed. Although at times it was admittedly frustrating and stressful for all of us, our commitment to responsiveness and do-ability resulted in many significant shifts and compromises along the way. As a result of school-based input concerning the multiple demands placed on instructional time, for example, we identified the enrichment days of the IE block as our project meeting time. Additionally, at the prompting of the school principal, we compromised by helping him to implement his vision of the "Deck the Halls" college-themed Spirit Week activity although we felt that the idea of a competition was counterproductive and the focus of the activity was not of particular interest to the students. We also made several adjustments to be responsive to the time concerns of others. Being able to move forward often meant "making it work" under less than ideal circumstances. We made the difficult timing of the designated week for Spirit Week work and took a break from the project to accommodate the desire of mentor teachers to emphasize test preparation in the week leading up to the standardized test. Lastly, the input of key stakeholders and constraining circumstances also meant that we had to occasionally abandon plans entirely. This was the case, for example, with several items on the students' original "dream list" as well as student involvement in "Community Day."

How did we "maintain a reform-oriented focus"? At the same time as we were committed to responsiveness, we also strove to maintain a reform-oriented focus, making judgment calls regarding when it was important to push certain issues rather than compromise. Although the group was willing to compromise on the Deck the Halls activity for Spirit Week, for example, they repeatedly advocated for students to have a voice in other areas. At times it seemed as though other adults wanted the students to

assist them in carrying out their vision, rather than empowering them to make meaningful decisions about what Spirit Week should involve. The student teachers served as student advocates in these negotiations, as well as advocates for the middle school concept, reminding others that one of the goals of the project was to give students a voice in their school. As a result of this advocacy, students were allowed to choose most of the themes for the Spirit Week dress-up days. Time constraints also often resulted in pressure to move more quickly, which presented the temptation for the student teachers to make decisions and move forward without student input. When student teachers expressed this concern in inquiry group meetings, however, they would remind one another of the importance of taking time to engage students in the decision-making process, even if it meant moving slower.

How did we "make meaning"? Each inquiry group meeting routinely consisted of a mixture of sharing, planning, and making meaning of our experiences through discussion. In each inquiry group session, we would frequently make sense of, among other things, trends in student reflections, struggles in classroom implementation (e.g., management, scaffolding, pulling in disengaged students, etc.), and negotiations with other key stakeholders (mentor teachers, school-based university contact, school principal, etc.). When someone would share a particular challenge or shining moment from their class, I would often follow up with the question "What sense do you make of that?" or "Why do you think that happened?" This would often lead into other group members affirming or questioning their colleague's interpretation based on their experiences.

Similarly, on occasions when I spoke with student teachers to troubleshoot around pressing challenges outside of inquiry group meetings, I would prompt them with similar

questions as a means to inform next steps. In this way, the vast majority of our interactions in this phase expressly focused on making meaning of our experiences through discussion.

Phase 3. This final phase began in mid-May, after the popsicle party and awards ceremony, which marked the end of the social action project. In this phase, we collaboratively reflected on the innovation we had developed, student feedback, and our experiences associated with participation in ROCI. Since this phase also corresponded roughly with the end of student teaching, I chose to wait until other responsibilities tied to this transition (edTPA, final papers, etc.) were completed before scheduling post-interviews and our final inquiry group meeting. Once the group members communicated that they were ready, each student teacher participated in a final interview and the entire group met once on campus for an extended final inquiry group meeting. We also identified two opportunities for students to share their innovation and experiences with an authentic audience.

Make meaning. Similar to Phase 2, meaning making in phase 3 consisted of critical and collaborative reflection. The difference, however, was that emphasis was now placed on summative reflection and synthesis. Since this was the final phase of ROCI, the group turned their attention to 1) determining to what extent they felt the innovation was successful, and 2) reflecting upon the challenges, benefits, and strategies learned through their collaborative inquiry experience as a whole. In preparation for post-interviews and our final inquiry group meeting, student teachers reviewed their students' final reflections and came prepared to discuss. Themes and surprises from the student feedback were subsequently discussed in the post-interviews as well as the final inquiry group meeting.

Each student teacher was also asked to reflect on the goal of the innovation they had developed and, drawing on data and their experiences, consider to what extent they felt they were successful in attaining this goal.

Post-interviews were designed to explore the challenges and benefits experienced by student teachers through participation in ROCI as well as any strategies they had developed to cope with challenges. Prior to the final inquiry group meeting, I conducted some preliminary analysis for themes across three categories: challenges, benefits, and strategies. I then brought these themes to our meeting for consideration, asking the group to consider the following questions: *To what extent does this reflect your experience?* and *What would you add, change or take out?* This led to some animated discussion concerning individual themes and assisted me in developing a more nuanced understanding of the student teachers' experience of a given theme. I also took note of those themes that either resonated less or elicited some disagreement, which subsequently informed the next round of data analysis. We then celebrated the end of the social action project and data collection over dinner at a restaurant.

Share. The student teachers were presented with an opportunity to formally share their innovation and critical reflection on challenges, benefits, and realizations with an authentic audience by sharing their in-progress work with a new cohort of students enrolled in my middle level education class. (Due to scheduling issues, this took place in late April, prior to the last day of the project.) This presentation included a brief overview of their social action project followed by discussion relating to what the student teachers felt they were learning about reform-oriented teaching in the process. Particular attention was also given to the ways in which they were striving to bring certain AMLE

characteristics to life. Since this presentation was to students enrolled in the same class through which we had originally met (and in the same classroom!), this sharing session had that special full-circle feeling and highlighted to the student teachers just how much they had grown and experienced since we began our work.

The Student Feedback

In this section I address the second research question for Study 1: What does middle school student feedback indicate about their experience with our project?

Drawing on analysis of the student feedback, I share findings relating to 1) the students' favorite and least favorite parts of the project, 2) the extent to which they felt the project gave them a voice, was important, and made a difference, and 3) lessons they reported learning through participation in the project. As was explained in Chapter 3, parental consent and student assent were received for 28 students but for a variety of reasons, the student teachers only received final reflections for 21 of these students.

"Fun" Parts

To better understand the aspects of the student-driven social action project that middle school students liked best, I analyzed student responses to the following prompts on the final reflection:

- 1. Think about the work you did in your I/E period to promote a positive school culture at your school. What were some of the highlights of this experience for you?
- 2. Describe your favorite part of this project.
- 3. What was so great about the part you described in question #2?

This analysis indicated that some of the school-wide activities that students helped create were definite favorite moments. Spirit Week was the most popular favorite (with thirteen students referencing it in one of their responses), which makes sense since this was the group's largest success. In fact, when prompted to explain what was so great about Spirit Week, several students replied with some version of the explanation "that we actually got to succeed in doing it." Not surprisingly, several students also shared that they loved that Spirit Week allowed them the freedom to dress out of uniform and that they enjoyed "seeing everyone's spirit." Additionally, students identified making posters, decking the halls, the block party, and for one student, the writing of the S.O.U.L. proposal as favorite activities associated with the project.

Many students wrote about other aspects of the learning process that they found particularly enjoyable. Several responses pointed to the perception by students that this project allowed them to <u>do</u> a lot of things. One student, for example, wrote that "We got to do a lot of things like come up with ideas, have other classes help us, got to do posters and flyers." Another wrote that "We got to do a lot of different things and go crazy." This seems to imply that students perceived the work that they were engaged in throughout the project as being different somewhat from their standard experience in school. And that, moreover, they enjoyed this shift in pace. Along those same lines, several students shared that they appreciated that this project presented them with opportunities to "get out of the classroom to interact with other students and teachers."

Variations of "coming up with ideas together" were also referenced six times, which the students explained was fun because it allowed them to "see what everyone had to say" and "work together." Students shared that they also enjoyed working in groups

and meeting new people. In this way, students seem to have viewed the project as a unique opportunity to get to know their classmates, which was apparently something these students took great pleasure in.

Lastly, the experience of actually having success in getting some of their ideas off the ground was referenced in several responses. In addition to the Spirit Week responses, one student asserted that her favorite part was simply "when our ideas were made possible" and another wrote that she liked "being able to have some kind of power and noticing that if we work hard it will happen." Yet another student echoed this sentiment by sharing that her favorite part was that "I got to change my school. My school was a little off and I got to fix it a little better." This response suggests that this student felt that, in some small way, their success had an impact on the school at large. This is further affirmed by another student who wrote that Spirit Week was "one of the few times that the eighth grade was on the page," a comment which I interpret as a testament to the power of school events like these to forge community and promote positive school culture.

Additionally, in response to the prompt, "Would you want to do a project like this again? Why or why not?," 20 out of 21 responders said yes, thirteen of whom wrote in that the project was "fun." One student also provided the rationale that the project was "not much work," which in conjunction with the "fun" factor, leads me to believe that students were not aware that they were working because the "doing" they were engaged in did not comply with their schema for school work. The remainder of student responses indicated that they would want to do a similar project again because they hoped to generate new ideas and organize more school-wide events. One response captured this

enthusiastic attitude best: "I would want to do another project just to see how much students can actually do to make a change."

"Boring" Parts

There were also clear trends in student responses to the prompt "What was your least favorite part of this project? Why did you dislike it?" Analysis of student responses indicated that tasks associated with the investigation phase, specifically researching, completing the school culture survey, and tallying the results were by far the least favorite activities (nine of fifteen who responded with an answer other than "none"). One student also asserted (in his reflection no less) that his least favorite part was completing the reflections. Students stated that they disliked researching because it was "too much work" and they "got confused." One word showed up several times as an explanation for their frustration with the tallying of the surveys in particular: boring. Additionally, students shared that they felt this task "took forever" and was "time-consuming." Interestingly, one student pointedly wrote that she disliked the survey thing because "it had to do with work." Once again, this affirms my suspicion that the students felt that a great affordance of this project was that it was different from what they were experiencing in other classes. As such, these tasks, which were perhaps more familiarly academic, were viewed as "boring" and less inviting. I find this especially interesting since a great deal of "work" was put into other phases of this project, yet students do not appear to have perceived it as such. I suspect that this is due to the active and nontraditional nature of the work they were doing (e.g., sharing ideas, planning events, negotiating differences, advertising, problem solving in real time).

Not surprisingly, three students also articulated that their least favorite moments were also some of the greatest disappointments in the project. Two students referenced the unfortunate meeting with the school administrators in which the ideas they were sharing were met with some confusion and conflict. They went on to explain that "it felt bad" and "I dislike[d] it because we had been planning the meeting for a long time." Additionally, one student stated that her least favorite moment was "when our ideas were not used," such as was the case with Community Day. Given the considerable ups and downs of the project, at least from where the student teachers and I were sitting, I find it surprising that so few students referred to these disappointments in their responses. This seems to imply that perhaps the "fun" factor and success of Spirit Week eclipsed these other disappointments. To this same point, six students wrote in a response of "none," occasionally following up with a statement to indicate that they "wouldn't change a thing" or "couldn't think of anything." This may be an indication that students were perhaps less frustrated than they appeared or did not perceive certain aspects of the work to be as stressful as the student teachers did. Alternately, however, this may be a result of the middle school students feeling compelled to tell the student teachers what they believed they wanted to hear.

Similarly, in response to the prompt "If you had to do this project again, what you would do differently?," six students wrote in the response "Nothing." Considering the burgeoning critical sensibilities in the middle school age group, this could indicate that students felt pleased overall with the project. This could also, however, simply be an artifact of reluctance on behalf of the middle school students to offer critical feedback.

The remaining respondents wished that the group had picked even more activities, started

earlier, and changed some of the ideas the group pursued based on feasibility and personal preference.

Feedback on Identified Goals

The social action project was designed to address student concerns that they wanted to have a voice in their school, particularly as it concerned promoting a positive school culture. At the same time, our goals for our collaborative inquiry were aimed at bringing the following reform-oriented practices to the classroom: 1) active, purposeful learning, and 2) relevant curriculum. With all of these aims in mind, I analyzed student responses to the following final reflection prompts:

- 1. Do you feel that this project gave you a voice in your school? Why or why not?
- 2. Was the work you did in your I/E period to promote a positive school culture important to you? Why or why not?
- 3. Do you feel that this project made a difference in your school? Why or why not?

Table 4.4 provides a summary of yes, no, and blank responses to these prompts.

Table 4.4 Summary of student feedback regarding identified goals				
	Number of students			
Prompt	Yes	No	Blank	
Do you feel that this project gave you a voice in your school?		3	0	
Was the work you did in your I/E period to promote a positive school culture important to you?		2	1	
Do you feel that this project made a difference in your school?	19	1	1	

Student voice. One of the explicit goals of the social action project was to give the students a voice in their school. The student teachers also designed the project experience

with the express goal of engaging students in active, purposeful learning, especially in the form of decision-making regarding content and process. With these aims in mind, student perceptions of the extent to which they felt the project gave them a "voice" was especially interesting to the group.

In response to this prompt, 18 students responded yes and three responded no. Simply being able to share their ideas and "express ourselves" was mentioned as a rationale for two "yes" responses. The majority of students, however, supported their "yes" answers with evidence that their ideas were actually implemented. Such responses included, for example, "our ideas were heard and put into action sooner than I expected" and "because we got most or half of our ideas accepted." Many students also directly referenced school leadership in their responses, explaining that they felt they had a voice because "administration listened to my ideas." One student provided the explanation "because we thought it wouldn't happen and it did!" These responses suggest that student perceptions of having a voice in school is tied not only to opportunities to express their ideas, but also to the extent that school personnel are open to and responsive to their ideas. These responses also seem to indicate that the initial let-down of the sharing meeting with the school administrators was overshadowed by the eventual delivery of some ideas, most notably Spirit Week.

The emphasis placed in these responses on student ideas (e.g., "my ideas," "our ideas") and shared power (e.g., "being heard," "administration listened") also affirms the relationship between learner-centered instruction and student voice. If the classes had been instead tasked with helping to implement pre-designated school-wide events, I suspect that fewer students would have responded yes. One student response in particular,

underscores this point---"I felt like this project not only gave me a voice, but all students in general because it was a student-run project basically."

The three students who responded no provided the following explanations: "People still act crazy and a little has changed" and "Either way there are still things that we can't do." These responses seem to indicate that these students felt like the small changes that were made were too inconsequential to warrant a "yes."

Importance or "relevance." In the phrasing of question #2, the phrase "important to you" was carefully selected as a proxy of sorts for the somewhat ambiguous term "relevance." As was explained earlier, while curricula can be argued to be "relevant" for many reasons---relevant to common topics of interest to middle-schoolers, relevant to 21st century careers, relevant to a timely issue----we were aiming for a very particular form of relevance: personal relevance. For this reason, the phrasing "important to you" was used as a proxy to avoid student confusion regarding this term.

In response to question #2, 18 students responded yes and only two students circled no. Explanations for yes responses fell loosely into four categories: 1) the goal of the work was important, 2) students felt they were proving a point, 3) students felt they had a central role, and 4) it was fun. First, students shared that the goal of promoting a positive school culture was important to them for a variety of reasons, including "I want my school to be a great environment," "our school has too little school events," and "I don't want my school to be negative." One student poignantly wrote that "I feel like if we have a positive school culture, we have positive happy people, and happy people means better learning."

The students seemed to also believe that the work was important because it was helping them to prove a point of some sort. One student wrote, for example, that she wanted to "show [that] when we want something, we work for it." Likewise, another student felt motivated by the potential for this work to provide an example for others, thus have a lasting impact, stating that "lots of other grades will learn and maybe do the same."

Some responses seemed to emphasize the central role of students in the project as particularly important to them, responding yes because "I got to help" and because this work "let people express ourselves" and "helped us work together on something I can improve." I interpret these responses to imply that being an active participant with a voice in the project was also related to students' perceptions of the work as important.

Lastly, some students simply referenced the "fun" factor again, asserting that the work was important to them because "it was fun and I will never forget it" and that it "makes school more fun." One student also shared that "bringing the community together to have fun" was especially important to her. Although perhaps self-evident, these responses are another reminder that the importance of "fun" in the middle school classroom is not to be minimized and can also assist students in viewing their work as important.

The two students who circled no provided the explanations that "It was not fun and it was boring" and "cause it was boring." I was perplexed to read, however, that these same students responded yes to the question "Would you want to do a project like this again?" Their explanations were "cause we didn't have to do much work" and "it was AWESOME and FUN!" I wonder, therefore, if perhaps the inclusion of the phrase "the

work you did in this project" was interpreted to be a reference to those parts of the project that they felt were "work"---researching, conducting surveys, and writing reflections. If so, their responses could be taken as an indication that although the overall project was important to them, the parts that they perceived to be "work" were not.

Making a difference. Question # 3 was aimed at determining to what extent the students felt they had succeeded in the goal they had set forth for their social action project. In response to this question, 19 students circled yes and only one circled no. An analysis of the yes responses revealed three trends: 1) it made our school more positive, 2) it impacted the students themselves, and 3) it set an example.

Students who felt the project made the school more positive provided a host of evidence tied to the impact of their work. For example, students reported that we "got some stuff done," "we got admin to help us!," and our "ideas were accepted by teachers and changed school." They also cited Spirit Week and the block party as examples of "some things we have never done before." There were also a few students who seemed to believe that the project made a difference in the school because it impacted those who participated in the project, writing that "we all got to have fun and express ourselves," we "showed people our feelings," and this project "improved the way we think." Lastly, a few students indicated that the project made a difference because it set an example for others. One student wrote, for example, that "It gave us a chance to show that if you just work together you can make a difference" and another asserted that "If we hadn't done this, students wouldn't feel like they could change the school."

Conversely, the one student who circled no explained that he felt "the school got stricter." Although this was not the majority experience and is perhaps a reflection of

factors beyond this particular project, it is also a reminder that not all students will experience events the same way and that student-driven social action projects such as this are not a magic bullet that guarantees 100% student satisfaction.

Lessons to Remember

As part of their final reflections and the banner activity on the last day, students were asked to identify one lesson they would be taking away from this project. Although students responded with a wide range of lessons, the majority of their responses fell into the following three categories: 1) hard work and determination, 2) teamwork and leadership skills, and 3) empowerment.

Lessons concerning "hard work" appeared frequently across data sources. Some illustrative examples included "If I set my mind to do something and I work for it I can do whatever I want," "When you work hard for something, it happens," and "If you work hard, good things will come out of it." Students also shared various iterations of the phrases "Never give up on your dreams" and "Anything is possible," although one student also tempered this with the lesson "Don't expect to get everything you want."

The phrase "teamwork" occurred most frequently across data sources. While many students simply wrote "teamwork" and one student wrote "teamwork=fun," other responses indicate that students learned about the importance of teamwork as well. Students wrote, for example, that "when we work together we can make AWESOME things" and "teamwork brings success." One student responded that she also learned "how to work with people and how to have better teamwork" and another student asserted that the project helped him learn "how to be a good leader."

Lastly, students shared a variety of empowering lessons concerning the importance of their voice. Such lessons included "believe in yourself," "how to speak up," and "don't be afraid to ask (Spirit Week)." One student wrote in bold letters on the banner that the project was a "boost self of steam [sic]." Additionally, students learned valuable lessons concerning the role they can play in change, writing in responses such as "I can make a change and do something good" and "we can change the world." Two student chose to borrow from the famous words of Carl Bard to write the following on their class banner: "Though no one can go back and make a brand new start, anyone can start from now and make a brand new ending."

Conclusion

In light of the previous illustration of ROCI in practice, I close by re-emphasizing that the precise innovation that our group developed for this school and these students is but one example and should not be viewed as the gold standard for innovations developed through ROCI. Many possible variations can be envisioned for innovations developed through ROCI for varying participants, schools, and content areas. Throughout this work there were multiple decisions made that ultimately impacted the specific nature of this innovation, which in turn was associated with its own set of affordances and challenges. The decision to do the work in I/E period, for example, which was motivated by a desire to "adjust responsively" to the demands placed on the core classroom at LMS, offered us a considerable amount of freedom to innovate. At the same time, however, it also presented considerable challenges in that it was a non-graded period in which students were not typically expected to complete academic work. (This challenge is further discussed in Chapter 5.)

Alternatively, a decision to develop a different innovation that would be more embedded in content area instruction may have limited the student teachers' capacity to innovate but may also have provided them with more opportunities to experiment with teaching practices such as differentiated instruction and assessment. Likewise, while the decision to investigate and propose ideas for the school community was motivated by student input and thus in line with the AMLE characteristics selected by the group (i.e., "active, purposeful learning" and "relevant curriculum"), the resulting project was also politically complex. And lastly, had this work been completed with another teacher educator, I also do not doubt that the focus of the innovation would have been different. Although I did not drive the decision-making of the group, our previous work with service learning in my course, undoubtedly informed the student teachers' selection of this particular emphasis. For this reason, while there is much to learn from this example, the specific nature of the innovation developed herein is thus not a blanket recommendation for all future iterations of ROCI. Rather, the focus and logistics associated with innovations created by other groups engaging in ROCI would and should vary greatly.

To summarize findings from *this* iteration of ROCI, the student teachers adapted the IPARDC service learning process to engage their students in investigating, proposing initiatives, and taking action around the following essential question: *How can we promote a positive school culture at Lakeview Middle School?* This project ultimately resulted in the creation of a Spirit Week and Teacher Appreciation Week as well as a proposal for a student leadership group entitled the Society of United Leaders (S.O.U.L.). Middle school student feedback revealed that the students especially enjoyed creating the

school-wide events, actually *doing* rather than learning about, and working together. Student feedback also indicated that their least favorite aspects of the project included those tasks that were most closely associated with traditional "work" (e.g., researching, completing the school culture survey, and tallying the results) as well as some of the disappointments experienced along the way. The majority of middle school respondents reported that they felt the social action project 1) gave them a voice in their school, 2) was important or "relevant" to them, and 3) made a difference. The middle school students also reported learning lessons across three themes: 1) hard work and determination, 2) teamwork and leadership skills, and 3) empowerment. In the following chapter I discuss five challenges faced by the inquiry group throughout ROCI.

CHAPTER FIVE: CHALLENGES EXPERIENCED IN ROCI

In this chapter, I report my findings for the first research question from Study 2: What challenges did the group face throughout ROCI? The five challenges discussed in the following sections are 1) a disconnect between College of Education (CoE) and Lakeside Middle School (LMS) visions of teaching, 2) being "just an intern," 3) cultivating student engagement in "new" teaching approaches, 4) time, and 5) collaboration.

Given that they stem from the same experience, all of these five challenges are dynamically connected. As such, some overlap will be evident in the discussion of individual challenges. The discussion of each challenge reveals something different about the group's experience. This in turn brings forth unique implications for the field of middle level teacher education and the goal of reform-oriented collaborative inquiry as a pedagogy for student teaching. For this reason, I will discuss each challenge separately while also synthesizing and connecting ideas across challenges when relevant.

Additionally, since facing many of these challenges also yielded opportunities for great learning and growth, the challenges discussed in this chapter are closely tied to the benefits. For organizational purposes, however, I will focus on challenges in this chapter first, which will in turn set the stage for the related benefits, which will be the subject of Chapter 6.

Since I was interested in the challenges faced by the group during ROCI, myself included, findings related to my experiences as the teacher educator/researcher are embedded where relevant along with the student teachers' experiences. As I share our group's challenges, however, I am sensitive to the fact that some voices are absent in this

work. For the purpose of this study, I did not interview or collect data directly from mentor teachers, school administrators (Mr. Plum or Ms. Jones), or our school-based university contact (Ms. Pat), who were at times involved in the work of the student teachers. As a consequence, the challenges discussed here draw exclusively on the perspectives of the four student teachers and myself. The absence of these perspectives, in particular, means that the versions of events in this chapter are necessarily incomplete. Nonetheless, this work was designed with the express purpose of investigating student teachers' experiences and perspectives as they attempt to innovate in reform-oriented ways. Since perception is reality for the perceiver, their perspectives are most relevant to the purpose of this work.

Disconnect between College of Education (COE) and Field Placement Visions of Teaching

As the group progressed through the stages of ROCI, they became increasingly aware of a significant disconnect between the visions of teaching emphasized in our College of Education program and the dominant vision of teaching evident at Lakeview Middle School. As was discussed in Chapter 1, the group was aware of this discrepancy prior to student teaching as it had been a frequent student-initiated topic in my middle school foundations course. Yet once student teachers were in their classrooms full time and tasked with greater responsibility in teaching, this disconnect became more apparent and troublesome as the interns began experiencing some of the implications firsthand. This disconnect was evident in two ways: 1) limited school implementation and understanding of AMLE characteristics, and 2) perceived resistance to "new" ideas.

Limited School Implementation and Understanding of AMLE Characteristics

While our middle level teacher preparation program is built around AMLE standards and, by extension, our courses emphasize the AMLE characteristics and associated teaching and learning practices, the student teachers reported seeing very little evidence of any of the AMLE characteristics in their field placement classrooms. While the student teachers could at times reference a few attempts at individual characteristics in one or two classes they observed, all four student teachers reported fundamental gaps across all of the Curriculum and Instruction characteristics. This quote from Danni offers one thoughtful illustration of the ways in which the student teachers felt that LMS fell short in several key characteristics (in this case teaming and integrative, relevant curriculum):

So the curriculum that they have in Science is very integrative. It's old and outdated but it's pretty good...but I think the curriculum itself across the board is hindered by the teachers' willingness to make relevant connections between stuff...they're not willing to work together. Planning period is social hour. It's not planning. They don't make it integrative, which would in turn make it more relevant for the students if they saw the connections across the content. Then it would be more relevant.

Similarly, this excerpt from Charlie's post-interview speaks to her perception that the way in which students were being taught and assessed was missing the mark of the "challenging curriculum" characteristic:

It's definitely not challenging. My kids are, when I give them an open-ended question as opposed to multiple choice or fill-in-the blank, they have no idea what

to do. They're so used to fill-in-the-blank and multiple choice and find the answer, which is word for word the same as the worksheet in the textbook. And they're not really learning anything from that. And I can tell that they're not learning anything from that because when I give them an open-ended question, they have no idea what to do with it.

The student teachers were especially disturbed, however, by the ways in which they felt that LMS was deficient in the "school environment" characteristic, which states that "the school environment is inviting, safe, inclusive, and supportive of all." The following two excerpts from post interviews provide an illustration of what the group perceived as a considerable gap worthy of great concern.

I don't know about safe. As far as emotional well-being, there's a lot of "deal with it yourself" and then yelling at them for not coming to an adult before getting into a fight. And there's no encouragement to---the teachers don't try to develop a community in their classroom at all and so there's no inclusive language, there's no emphasis on inclusive language. I'm the only teacher I have ever heard reprimand a student for using the r-word or for saying "gay" or things like that. (Charlie)

There's a lot of kids using the word prison to describe what it feels like there.

Reading some of the reflections, I read things I didn't even know. Some kids got in school suspension because they wore shorts on Sports Day. So yeah, there's still---with this sort of totalitarian sort of regime feeling in there, it's gonna, that has to give before a lot of this can come in because at LMS it all stems back to the mistrust that administration has for the students. I wish that they could take those

goggles off and realize how detrimental that is to everything that not even we're trying to do there but just the kids in general, like the model it is setting for them for the rest of their lives. I feel like giving a little could go a long way but, whether it be from bad experiences or something, they are just like an iron grip on everything. And it goes back to, I don't know if it was our class, but the different types of schooling---I still feel they're a fortress school. And in terms of the AMLE concept there, it's just---sigh. (Bobbi)

As further evidence of this disconnect, the student teachers frequently spent a portion of our inquiry group meetings (unprompted by me) venting about developmentally inappropriate practices they had witnessed at LMS. The vast majority of these involved teacher-student interactions in which a faculty member yelled at, insulted, or threatened a student in a way that the student teachers felt was wildly inappropriate. Occasionally, the student teachers would also share a conversation they had either overheard or been a part of, which revealed a deficit view of middle school students and/or the family and community they were serving. In addition to these impromptu debriefings, I would periodically receive unexpected phone calls, texts, and emails from individual student teachers wanting to talk through an interaction that was troubling them. Although there tended to be nothing we could do about these incidents, the student teachers seemed to need and benefit from an opportunity to simply talk through what they were experiencing.

Additionally, while the student teachers also reported encouraging conversations with school faculty about reform-oriented practices with which they were experimenting, some of their interactions also indicated that some of the school faculty were confused by

the AMLE characteristics emphasized in our teacher education program. The student teachers especially struggled at times to get others to see the importance of giving students a voice in the learning process through "hands-joined learning" or "active learning." Since other school-level collaborators were not always versed in some of the reform-oriented practices and "new" pedagogies being used by the student teachers, they would occasionally pull a project in a direction that moved away from student-centered active learning. In her post-interview, Ray offered this example of how she experienced this challenge with a co-teacher (in her mentor teacher's classroom) who would often interject on student discussions for great lengths of time:

In a lot of the things that we did, like when I first introduced our ideas, one of the teachers would jump in a lot and put in her 25 cents instead of 2 cents, and it wasn't as much student-centered. I think she means well and is trying the best she can, she just doesn't understand the concept.

In relation to the planning of Spirit Week, Danni also noticed that the school personnel sometimes conflated "student involvement" and "student voice," asking the following provocative question regarding the role of the middle school students in the planning: "Are they really being given a voice? Or just asked to get involved in a pre-dictated agenda?"

These experiences proved especially frustrating since it meant that student teachers were in the uncomfortable predicament of either having to politely disagree with a more experienced faculty member or compromise principles they were especially passionate about. This challenge was exacerbated by their status as novices in the

building (which will be discussed in more detail in a future challenge) since they were understandably weary of coming off as hypercritical or know-it-alls.

Perceived Resistance to "New" Ideas

Given this limited implementation, we were continually aware that our student-driven social action project, although rooted in research and best practices literature, was not in step with the status quo at the school. As was described in Chapter 4, in phase one of the project, I worried that we were perhaps challenging the status quo too much. The student teachers, however, did not feel this same concern initially and as such, when they were met with what they perceived as "resistance" from the administration and other school personnel, they were much more surprised than I was. In response to the prompt "What challenges did you face throughout ROCI?," Danni confidently and immediately stated, "The school being resistant to innovative ideas and new practices." Indeed, in their post-interviews, each of the four student teachers independently identified some variation of "resistance to new ideas" as a pervasive challenge they faced while engaging in ROCI.

While the approval of this work by our school-based university contact suggests a certain openness to innovation, the student teachers experienced inconsistent support from school-level personnel (who had originally presented themselves as allies) as they attempted to actually enact their innovation. Several school personnel with whom the group worked---Ms. Pat, Ms. Jones, Mr. Plum---expressed initial interest in the work and encouraged the student teachers to involve them and share their ideas. These same people, however, were inconsistent in their accessibility and support. Although there are no doubt many imaginable reasons to explain these actions, as it concerns the perspectives of the student teachers, this disengagement was perceived as passive resistance. The group thus

felt that key stakeholders were engaging in doublespeak, saying they supported their reform-oriented work but then passively disengaging or, at worse, actively undermining it. This overall perception resulted in a great deal of uncertainty and the sum feeling that several key faculty members were in actuality not supportive of practices espoused by AMLE.

Bobbi explained, for example, that "there's so much resistance there. They give you the word-speak and all that like 'Oh yeah! Yeah! Yeah!' and then when the time comes, it's like, 'Oh no, we can't do that!'" Ray echoed this sentiment by asserting that she felt that people at the school "would say one thing but mean another." Danni also spoke about the difference between words and actions and phrases such as "broken promises" "mixed messages," and "doublespeak" occurred in three of the four student teachers' post-interviews.

This was especially true in the group's perception of the school principal, Mr. Plum. From pre-ROCI to mid- and post-ROCI conversations, the group experienced a considerable shift in their perspective regarding administrative support of AMLE principles. In our initial focus groups, prior to beginning ROCI, the group was very confident that the principal would be supportive of any work built around the reformoriented middle school concept. Having heard him on many other occasions speak about a school vision that resonated with AMLE principles, the student teachers would frequently comment that they were excited to share their ideas and resources with the school principal. Ray, for example, asserted that "Mr. Plum has the say and this is what he wants...he wants inquiry-based learning, he wants this." Danni added that "I don't think permission is going to be a problem because he's working with us." In our final

pre-ROCI summer focus group, while discussing their wish for administrative support of their work, Bobbi passionately stated the following:

After listening to Mr. Plum talk the other day, I feel like if he means what he said when he said "Bring me what you guys know because I know there's so much out there that I don't know. Tell me because we want to make the school the best"---if he really is sincere about that, then I feel great about this.

However, as the student teachers transitioned into full student teaching and began to move through the phases of ROCI, their perspectives changed considerably. Mr. Plum's confusing visit to the classrooms and negative response to the students' sharing of initial ideas (described in Chapter 4) was certainly a turning point in their perception of him as an ally of the work. Beyond this interaction, however, which they were initially willing to accept as a misunderstanding, the student teachers had several further interactions that confirmed their concerns that AMLE middle school philosophy was not a priority for him in his school.

Although Bobbi conceded, for example, that Mr. Plum was "at times supportive and willing" and gave him "kudos for supporting Spirit Week," the general feeling among the student teachers was that his priorities were out of step with middle school philosophy. There were no interview questions that directly asked about the school leadership, yet the student teachers' perceptions of Mr. Plum as it pertained to the AMLE characteristics were heavily referenced in post-interviews. Here are just a few examples:

He's going through the motions. I never felt like he was on the same page as us, which when I think about this (points to AMLE characteristics), "The leaders are committed to and knowledgeable about the age group," I don't feel like he is. I'm

not sure if he doesn't know that or does know that or doesn't care. I don't know.
(Ray)

You hear him talking about the students and how they need discipline but it was code for they need to know how to do what they're told when they're told. Don't talk back. It's like a very old school mentality but it's also a very---what's the word like for prepping kids to grow up into like work machines? Like compliance, that whole sort of thing. And it's hard when you're facing a person in power, with that much power, when that's their mindset. (Bobbi)

I don't think that he is willing to take the time, the effort, and the laps in making a change like that in the school because he wants his teachers to do what they need to do to make the test scores good and I think a shift to active, purposeful learning would---it's different...when I asked Mr. Plum if he was familiar with this (pointing to AMLE book "This We Believe") because remember I had my book and I highlighted sections I wanted him to look at if he was trying to do it? I mean this page was marked and I had stuff circled and bulleted for him and he was just like---I said "Are you familiar with this?" And he goes "Mmm-hmm" and did that little headshake eye-roll thing at me, like, ugh. Maybe he does know what it is but clearly he doesn't. He's not drinking the kool-aid. (Danni)

The group was further disappointed in the difficulty they experienced in attempting to collaborate with school administration, which again felt like passive resistance and doublespeak. Despite Mr. Plum initially inviting the student teachers to share ideas with him (as was described by the group pre-ROCI), Bobbi shared that, in actuality, Mr. Plum limited dialogue rather than inviting discussion with kids and

teachers and that when you were given permission to try something new, you were very aware that at any point, "he could and would shut things down so quickly." In her post-interview, Bobbi reflected that

It's not a dialogue, it's not a discussion. When they say "No I don't think that's a good idea," that's not their invitation for you to discuss and try to support your reasoning. That means "I'm saying no. It's done. Drop it." There's this feeling of—he does it with students too—there is no speak back. There's nothing. "I've said it. That's it." And that makes it difficult.

Danni and Ray also expressed concern that their only formal meeting with the school principal was eventually scheduled at the insistence of the principal's secretary, who was interested in Spirit Week and had direct access to his schedule. Ray bluntly stated that one of the biggest challenges was "Getting admin to sit down and listen to us." She elaborated by saying:

We tried several times to get Mr. Plum to come listen to what we were doing, to just give him a brief overview and he wouldn't. And then finally he did and he didn't want to really listen to us. The principal's secretary made him come to the meeting.

The group had a similar experience with Ms. Pat, who despite the initial support she expressed at the start of the project, disengaged from the group and was somewhat adversarial once they were in the midst of this project. Although this will be described in greater detail in the discussion of the challenge of "being just an intern," for the purpose of this challenge, suffice to say that this only served to further confuse the student teachers and affirm their growing sense that the school was resistant to new ideas.

Similarly, Ms. Jones, a school administrator who initially expressed great interest in the group's work in the beginning of Phase 2, became all but impossible to meet with as the year progressed. Following the initial support and encouragement they were given by Ms. Pat and Ms. Jones when the work was simply hypothetical, the student teachers interpreted this lack of follow-through as another example of doublespeak. This resulted in frustration that is clearly expressed in the following quote by Danni who was asked to expand on what she meant by "the school being resistant to new ideas and practices":

Ms. Pat, first of all, just really saying that you are on board with one thing and then throwing a fit when you actually go through with something that you said you were going to do.

These experiences underscore the complicated and frustrating work of navigating school politics and school bureaucracies. The extent of this challenge came as somewhat of a surprise to the group, myself included. In a final reflection, Charlie identified the following about the political difficulties they faced: "The politics, especially in working with our school-based university contact---that surprised me. I don't know why." And Bobbi seemed equally surprised, reflecting that "It's like I'm learning to play politics there!" Although we did discuss the importance of administrative support in our initial pre-ROCI focus groups, the consensus among the student teachers seemed to be that Mr. Plum would be readily supportive of this work. We underestimated, however, how difficult it would be to collaborate with key stakeholders and may have optimistically overestimated the extent to which the administrative priorities aligned with AMLE. All of this greatly impacted the ability for the group to make forward progress, a point that is clearly articulated in this excerpt from Bobbi:

It's bad enough if the kids don't have experience with this type of thing. It's difficult enough to expose them to student choice and making things relevant and fun and listening to them, sharing power with them on what's going on. That's bad enough but that's doable. I mean that's kind of to be expected a little bit. But when it moves up the chain to the top where it's like that, that's really difficult!

In retrospect, I believe that the way in which I was given entry to LMS, which was described in greater detail in chapter 4, contributed greatly to the group's perception of the school leadership as "resistant." Specifically, since I, as the researcher, had been advised by our school-based contact, Ms. Pat, not to bother the principal and instead work through her only, our group was in an awkward position vis à vis the administration. The simple fact that I was never able to meet directly with the principal had repercussions that rippled through the duration of our work. Since I never met directly with the school leadership, although the student teachers eventually did in Phase 2, we began this work with a limited sense of big picture school goals and were left to form our own conclusions based on interactions and second-hand information. As the teacher educator/researcher, this arrangement made me persistently aware of my outsider status at the school and even more so, due to the perceived resistance described above, the occasional uncomfortable sense that I was an intruder of sorts. For the student teachers, this arrangement also resulted in an unsettling sense that our project was unwelcome or covert.

Despite this being the preferred arrangement of the school, or at least of Ms. Pat, if I had to do it over again, I would insist on a pre-ROCI or Phase 1 meeting with school

leadership as a means to share our intentions, learn about school-wide goals, receive feedback, gauge administrative support, and develop norms for further communication. As it concerns this research, however, I interpret the difficulty experienced as a result of this collaborative arrangement as further indication of the disconnect between our CoE and LMS. Although such collaborative work is indeed written into our memorandum of understanding, there existed no clear protocol for initiating such work and communication among stakeholders was extremely difficult. Although there are no doubt good explanations for this disconnect (e.g., competing demands placed on stakeholders, organizational health of the school, conflicting visions for university-school partnerships, etc.), the student teachers experienced these difficulties as resistance and this perceived resistance was not conducive to innovation and collaboration. To the contrary, it seemed rather to serve as a deterrent, which is counterproductive to the goal of supporting student teachers in enacting reform-oriented practices through induction and throughout their careers.

Being "Just an Intern"

As the student teachers engaged in ROCI, their role as an intern in the school also presented some challenges. Indeed, the consensus was that the school level resistance they experienced in their attempts to innovate was exacerbated by, as Charlie put it, "being an intern at the bottom of the food chain." This challenge manifested itself in two dominant ways: 1) variation in mentor teacher expectations, and 2) mixed messages from stakeholders regarding what it means to be "just an intern."

Variation in Mentor Teacher Expectations

The largely peripheral role of the mentor teachers in this iteration of ROCI

created an awkward dynamic, which at times resulted in tension. As a reminder, although I had initially hoped to investigate ROCI with student teacher and mentor teacher dyads, given the simultaneous launch of a new curriculum as well as new common core mandates, I was compelled not to formally involve them in this initial investigation. As such, this collaborative inquiry did not meaningfully involve the mentor teachers. The expectation was simply that the mentor teachers would be open to innovation and Ms. Pat selectively placed the four student teachers with mentor teachers who agreed to this stipulation.

This arrangement meant that the student teachers had the additional responsibility of communicating with the mentor teachers to keep them appraised and invite their feedback. Since some of the mentor teachers seemed more open to innovation than others, however, the student teachers often needed to navigate these different expectations as they proceeded in developing and implementing the student-driven social action project. The decision to use the I/E period as a home for this innovation, for example, was in part influenced by the premise that the less supportive mentor teachers would be more willing to endorse innovative practices in IE than they would be during the core academic courses. While this did provide the student teachers with a space within which they could innovate with relative freedom, this also resulted in some other challenges relating to student engagement and pacing, both of which will be discussed in future challenges.

Three of the mentor teachers adopted a decidedly laissez-faire attitude about the work, giving the student teachers free rein (and all of the responsibility) during the I/E period and essentially stepping aside during this time. One of the mentor teachers, however, was described as "having a very negative attitude towards the project,"

resulting in some tense interactions between her and the two student teachers who rotated through her class---Ray and Charlie. Since Charlie was in this class the longest, she had the most to say about this experience, reporting that a significant challenge for her involved her

mentor feeling intimidated by the group's work. She never fought back about it that hard but she had that attitude of 'yeah, okay I guess'. She showed no interest in doing anything that the kids came up with whatsoever And although I kind of had the freedom during the I/E period, I didn't have the freedom to take what I was doing in IE and expand it in the next class.

As a result of this perceived apathy, Charlie was often compelled to compromise by abbreviating aspects of the project for her IE class so that her mentor teacher could use some of the class time for activities she had in mind. Although many of the other mentor teachers were pleased to allow the interns to flexibly embed the project into the IE time and Science or Math block (since they were back to back classes with the same group of students), this mentor was not in favor of this arrangement.

To the opposite extreme, one of the other mentor teachers was absent for an extended stretch of Bobbi's student teaching time, essentially leaving her as the lead teacher in the classroom. Because of this, Bobbi was unable to readily seek the feedback of her mentor teacher. Although the mentor teacher assured Bobbi that she trusted her judgment and was giving her permission to innovate in the IE block, this nonetheless left Bobbi in a different circumstance than her colleagues. Specifically, this meant that the mentor teacher was absent during the IE block all together. Bobbi was thus tasked with

managing a class by herself, which proved challenging at times and often meant that tasks took longer than expected.

These differences in mentor teacher support and involvement created uneven circumstances and constraints for individual student teachers with the group. Since they were collaboratively developing the project, this made it difficult at times to stay on pace with one another and agree on next steps. For Charlie and Ray, who rotated through the classroom of the mentor teacher who was less open to the work, this also created tension and some uncomfortable working circumstances. Arguably, these differences would likely have been present even if the mentor teachers had been included in the ROCI process. Nonetheless, the more substantive inclusion of mentor teachers in group meetings and the decision-making process would surely have given us greater insight into their perspective and may have also assisted us in reaching stronger compromises than those we developed on our own.

Mixed Messages About What It Means To Be "Just an Intern"

The student teachers also struggled with confusing mixed messages from key stakeholders regarding what it meant to be a student teacher in the school. Specifically, the student teachers reported significant differences between the expectations set forth by the CoE, school administration, and their school-based university contact regarding their autonomy and expected level of involvement in school improvement and/or reform efforts. According to the student teachers, their College of Education courses often presumed that student teachers would be given reasonable autonomy to develop new lessons and projects that reflected the AMLE reform-oriented vision for middle school teaching. Likewise, a great deal of focus was spent in coursework on topics related to education reform, best

practices, and equity, all of which implied that student teachers should be active members of their school communities. Additionally, as part of their student teaching responsibilities, the student teachers were required to participate in faculty meetings, department meetings, professional development days, and team planning meetings.

Similarly, the school administration at LMS made a point of building relationships with the student teacher cohort in their early field placements, seeking them out and encouraging them to share new ideas and ask questions. But as has been discussed previously, the school administration proved more difficult to collaborate with than hoped, which led to student teachers feeling as though this early talk was lip service. Nonetheless, these early interactions set the expectation that student teachers were invited to be contributing members of the school community.

In contrast, however, the school-based university contact, Ms. Pat, seemed uncomfortable with the student teachers interacting with school administration and frequently advised them against it. While this could be a result of a number of factors (e.g., confusion, school politics, personal preference, or a desire to protect the student teachers), this mixed message created a difficult predicament for the student teachers as they attempted to navigate these different expectations. Since the nature of the social action project they co-developed with students required input from school administration, the student teachers often found themselves overstepping ambiguous boundaries set by Ms. Pat regarding what a student teacher should and should not do. The following incident is particularly illustrative of this challenge.

During the early phases of the student-driven social action project, after their initial meeting with Ms. Pat in which she gave her support for the loose overview of their

proposed student-driven social action project, Danni and Ray happened to attend an especially relevant faculty meeting. One of the school administrators, Ms. Jones, shared her goals for LMS regarding school culture. She shared multiple examples of schoolwide events she had organized at former schools with the express purpose of creating community (e.g., Spirit Weeks, team block parties). The student teachers were thrilled to hear this and at the end of the meeting, enthusiastically approached Ms. Jones to share a brief summary of the work they were engaged in with their IE classes. A productive discussion ensued and, from this chance meeting, the student teachers learned valuable information about school goals. Through this discussion, arrangements were made for Ms. Jones to come listen to some of the middle school students' early ideas. Ms. Jones subsequently invited the school principal, Mr. Plum, and they visited two of the classrooms on a designated day to listen to their beginning ideas (as is described in Chapter 4). When Danni, in her excitement, later shared this new development with Ms. Pat in the copy room, she reported that she was berated and told that it was inappropriate of the group to work with administration and that the student teachers needed to "remember their place as guests in this school."

The group was flummoxed by this response and Danni was especially upset, angry and hurt that she had been chastised for doing what she felt was commendable work in line with her student teaching responsibilities. My subsequent attempts to reach out to Ms. Pat to seek clarity regarding her concerns and re-establish our collaboration were not successful and, as a result, we were unsure how to proceed. Ms. Pat would not respond to our attempts to continue working with her, essentially disengaging with the group, yet we also knew that she did not want the student teachers working with

administration. At the same time, Ms. Jones was continuing to seek out Danni and Ray to discuss next steps, expressing an active interest in the work.

We spent a great deal of time trying to make sense of this incident in our inquiry group meetings. As these quotes illustrate, the student teachers felt that this was symptomatic of the view that student teachers needed to be managed, supervised, and controlled:

I really just think she has an idea of what the interns should be like, you know? Very obedient, passive, whatever your mentor tells you to do. And even though she said this was a good idea, I think she thought it was a good idea---remember she kept calling it "our" project, remember? Control---when she had some control and then as soon as things were happening freely, she didn't like it. (Danni) I think she wanted to be more in control of what we were doing... I think she is all good when everything is in her control or she fully understands what we are doing. And then when it's a little uncomfortable, she is extremely uncomfortable, which I think is true for most of the administration. (Ray) I think that if something, you know, if other teachers were getting mad about it or if admin didn't like it, she was afraid that it was all going to come down on her. So I think that was her issue was that she---she didn't want to have it come down on her for what we were doing, the reform that we were trying to make happen. Especially as outsiders because that's how we were viewed. At least by her. And honestly I think we were viewed more like that by her than the other teachers. A lot of other teachers talked to us like we were just another teacher in the school. (Charlie)

These quotes also suggest that this desire to control or manage interns was motivated in part by school politics and fear of professional consequences, which further illustrates the pivotal role that school politics can play in the pursuit to challenge the status quo.

After this incident, Danni deliberated over whether to avoid Ms. Jones entirely in an attempt to be respectful of Ms. Pat's wishes. After much discussion and per the advice of the group, myself included, Danni ultimately decided to participate in the conversations with school administration since Ms. Pat had disengaged from the group and seemed to be setting unreasonable boundaries. During this time, in an email asking for my advice, Danni wrote that she felt "uncomfortable" and like she was "walking on eggshells," a sentiment which was echoed by the other three student teachers in our inquiry group meetings and further affirmed by Charlie, who poignantly shared that the entire incident "made us feel like we had to kind of tip-toe around certain things, especially being an intern at the bottom of the food chain." Indeed, at varying times throughout this ROCI process, all five of us expressed the general feeling that we had to tip-toe and eggshell walk our way through this work, which presented a challenge of its own since it produced a great deal of additional stress and dissonance between what we felt was right and what we felt free to say and do. Bobbi articulated her struggle with this dissonance as follows:

I wasn't in the position (to speak up) as an intern, even though I think that's me copping out because I feel like that's still no reason to not speak your mind and I'm a little ashamed that I didn't more.

These reflections illustrate the tension that these student teachers experienced as they attempted to make change while navigating their status as relative novices to teaching.

Cultivating Student Engagement in "New" Teaching Approaches

As the student teachers engaged their students in the student-driven social action project, they were faced with challenges relating to student beliefs and behaviors, which in turn impacted student engagement. First of all, the student teachers struggled to convince students that the project could work and that their voice would be heard. Then, as they progressed through the phases of the project, the student teachers faced teaching challenges related to student-centered instruction.

Convincing Students That Their Voices Were Important

The student teachers were surprised to discover that although the social action project was based on a topic that a large number of students had identified as interesting to them, some students were reluctant to participate because they did not think it would work. Bobbi shared, for example, that some students seemed to simply not think their voice was important, explaining that "A lot of their responses were 'It doesn't matter what I say---I'm a kid. Why would anyone listen to what I have to say?" In some instances, as is described by Charlie and Bobbi below, this disbelief also seemed to be related to the students' perceptions of the school leadership.

A challenge, especially in the beginning, was convincing students that the project would work because they had such a negative attitude towards how their input would be received especially from administration because they just felt that administration was their enemy. And getting them to recognize that admin was going to be the ally and that we could work with them. But they were just totally set on working against them. (Charlie)

They don't trust the kids. The kids don't trust them. So I feel like that's the biggest thing right now keeping all of this from happening...I still feel like administration is just kind of standing there hovering with a boot over it, waiting to just kind of stomp it out. And I think that the kids get that impression too.

(Bobbi)

Since the student teachers were receiving mixed messages and thus uncertain of how open the school administration would be to student ideas, this was at times an awkward position to be in since they did not want to speak ill of the school administration, nor did they want to set up their students for disappointment. To navigate this tension, they chose to make no promises but to instead emphasize the importance of self-advocacy and making your voice heard, even when there are no guarantees, an approach which will be discussed in greater detail in Chapter 6.

The student teachers also reported that a few students felt dubious because they had been let down before. In an inquiry group meeting, Danni shared that a student had told her "It won't work. Other teachers have told us we can make change before but nothing ever happened." This, of course, added to the pressure the student teachers were already feeling, which may have increased the student teachers' investment in the work but also increased their stress. There was, as a result, a sense that something symbolically greater was riding on the success of this project than a grade or an accomplishment. The group was driven by the desire to not let the students down, a concern which was raised frequently in inquiry group meetings as we occasionally struggled with how to respond to the resistance described above. As was clear in the student final reflections (see Chapter 4), the success of Spirit Week was viewed as a considerable victory by the students, not

just because it was fun but also because the school administration listened to their ideas.

Bobbi shared the following observation about the impact of Spirit Week success on student beliefs and participation:

I think what happened as the year went on, once they had the success of the Spirit Week stuff, that changed a lot of their perception...After they had the success, the participation in the second half did increase. They were motivated after some of the success.

Facilitating a Student-Centered Learning Environment

On a practical level, the decision to engage the students in the social action project during their I/E period had repercussions for student engagement. While this arrangement allowed the group the flexibility to innovate, it also meant that they were asking the students to participate in a rigorous project during a stretch of time that, in some cases, was typically filled with test preparation worksheets or study hall. To this point, Charlie and Bobbi respectively shared that "convincing students to do work during a period that had previously been a down period" and "getting students to actively participate when the I/E period was typically passive" were considerable challenges. Charlie explained that "Kids were like 'I've been goofing off and talking with my friends all year. Why do I suddenly have to do work during my down period?""

Additionally, the fact that the I/E period was a non-graded subject meant that the student teachers could not rely on the motivation of grades as an incentive for students and instead relied on the intrinsic motivation of students, which was less in keeping with the norm at the school. Charlie felt this was especially applicable to her TAG students

since she reported "their motivation is all about the grades." Bobbi also struggled against the dominant ways to motivate the students via threats of grade penalties:

What I refused to do is what my mentor would always tell me to do. She's like "tell them you're giving them a zero." I'm like "this isn't graded." She's like "Well tell them you're going to give them a zero for---threat, threat, threat, yell, yell, yell. And I'm like, I won't do that because that's defeating everything we're trying to do.

Instead, the student teachers developed alternative strategies to motivate students including positive recognition of amazing work, using enthusiastic students to motivate others, sending students from classes that were ahead to other classes to offer support and encouragement, and awarding students who participated in the social action project with a personalized certificate.

As relative novices to teaching, the student teachers faced an expected learning curve associated with enacting their student-centered vision. Likewise, since the teaching approach was reform-oriented, many of the middle school students were also unfamiliar with these instructional approaches, which presented additional challenges for the student teachers. Student reliance on passive learning was especially challenging as the student teachers attempted to engage their students in active learning. Danni shared the following observation regarding the preferred mode of learning at the school:

Some kids really like their book and their pencil and just sitting there and doing work, especially the Honor kids. They love worksheets. I don't know what's wrong with them! I'm like "You have amazing brains and you're wanting to do worksheets!?!."

In her final interview, Charlie further explained that the students are "not used to making decisions" and offered the following illustrative example from class:

They're becoming more familiar with it. I think they really enjoy having choices but they ask a lot of questions and they don't really know how to get started until you kind of talk to them in groups so that's what I did—I put them in groups and went around to each group. So I asked them "What do you guys want to do?" and then kind of specifically told them what their group needed to do from what their ideas were. Because each group had something different they wanted to do, working with them in small groups was a lot easier to give them some sort of direction especially when they're given choices for different methods. I said "You could do it in a powerpoint, you can make a video, you can write a paper, you can do a skit, you can do whatever the heck you wanna do." And so, of course most of them went to the powerpoint because they have made ppts before. They were like "This is the easiest thing to do so we're going to do a powerpoint." But then they're like "How many slides?" And they're not used to "do as many slides as you need to make your point." And that was my big thing. I was like "I don't care how many slides you have. I don't care if you have five slides or if you have one hundred slides if you can make your point." And they were like---What?!? So that was kind of an interesting thing. They're used to caring about a specific number of slides, not so much the content or what needs to be there.

In the same vein, enacting the social action project revealed the unique and important pedagogic skills required of teachers who take on the challenge of student-centered pedagogies. Classroom observations and inquiry group meeting discussions

revealed that the student teachers held some naïve conceptions in regards to student-centered instruction especially as it concerns the role of scaffolding. Finding the role of the teacher in "hands-joined learning" proved especially difficult at first. The student teachers at times seemed underprepared to facilitate a student-centered learning environment and presumed that their students would eagerly jump right into the open-ended nature of the project they developed. As such, they occasionally overlooked the necessity of scaffolding students into self-directed work. The move to enact these characteristics about which they were so passionate (e,g., active, purposeful learning) revealed a tendency towards idealist or extremist thinking regarding what these characteristics should look like in practice (i.e., entirely student-centered with a limited teacher role). This thinking was problematized, however, when the student teachers attempted to bring these ideals to life in their classroom with real kids.

Two of the students in the group expressed frustration during the investigation phase, for example, because the students were having difficulty exploring the idea of "positive school culture" by doing research online. Bobbi shared that she felt this was because "they don't know how" but upon further discussion, it became apparent that, rather than directing students to certain sites, the student teachers were simply asking the students to do research on positive school culture, which was likely much too open-ended for their students. Additionally, since middle school students often do lack the skills required to conduct research of this sort, this would have been a prime opportunity for a quick authentic mini-lesson on the creation of search criteria when conducting internet research.

In a brainstorming discussion involving Bobbi and the small group of students who eventually proposed S.O.U.L (Society of United Leaders), Bobbi seemed reluctant to make her own suggestions or offer direction, despite the fact that the students were floundering and greatly needed it. Similarly, in an inquiry group meeting, reflecting on some of the confusion that resulted during the teacher appreciation activity, Ray shared that she had "attempted to let the students manage the tasks but it's not going so well." In this case, students could have benefited from some clear expectations and guidance in managing their time and productivity, again underscoring the important point that "hands-joined learning" necessitates both the teacher's and the students' hands.

As will be discussed in Chapter 6, inquiry group meetings and our brief conversations after observations provided excellent opportunities for me to make suggestions regarding the practical aspects of student-centered instruction. The lessons learned as part of this challenge are thus among some of the most powerful benefits since they led to opportunities to develop concrete pedagogic knowledge in reform-oriented practices. Nonetheless, since our meetings were often filled with the urgent work of debriefing, adjusting plans, and determining next steps, the time we had together felt inadequate to address this confusion. Indeed, this thoughtful excerpt from Bobbi's final interview indicates that she ended her ROCI experience with some lasting confusion and frustration concerning the management of student-centered projects: "Getting them to engage was harder than I thought...I didn't find a good way to address this other than 'You need to focus'. I still don't know what to do besides just telling kids to keep on task."

This lingering confusion further reveals that, at least in the case of engaging students in "active, purposeful learning," reform-oriented characteristics require a

complex understanding of many teaching practices. While our collaborative inquiry created a space for the student teachers to innovate, they grappled at times with some of the key teaching moves required to bring them to life. This serves as a reminder once again of the complexity of teaching and the importance of multiple meaningful opportunities to practice, not just read or talk about, the work of teaching in teacher education programs. The theory to practice leap is indeed a big one, which appears to only be widened when student teachers are not able to see models of reform-oriented visions of teaching at work in real classrooms prior to their first attempt at enactment.

Time

As is often the case in teaching, time presented a considerable challenge for the group as we engaged in ROCI. We struggled with several interruptions and compromised timelines that were outside of our control. Additionally, juggling this work with other obligations proved to be quite difficult at times.

Interruptions and Compromised Timelines

Since the bulk of our planning and the implementation of the social action project took place in January through May, we had to contend with two considerable interruptions to our work: frequent snow days and state-wide testing. In January and February, as the group attempted to launch the project on the approved B days of their I/E periods, they were forced to delay scheduled activities due to four snow days and several late starts. As a result, the pacing map we had created before starting was almost immediately in need of revision. As snow days and late starts accumulated, however, it also became increasingly difficult to continually revise the pacing map. Since there was so much urgent catching up and planning to do in each inquiry group meeting, mapping

out the big picture often took a back seat. The additional, although expected, interruption of state-wide testing in March only contributed to the general sense that we were always off pace and scrambling to make progress.

Occasionally, we were also restricted by timelines established by others and which were less than ideal for our group and the students. The timing of Spirit Week, for example, was dictated by school administration. Although they had been hoping to develop a Spirit Week since January, it wasn't until they were finally able to meet with Mr. Plum and the principal's secretary in April that the group learned that the following week had been tentatively set aside for Spirit Week. Our requests to shift this timeline to allow for more planning time as well as greater student involvement were unsuccessful. As a result, the student teachers and students were forced to rush, which resulted in some disorganization and panic. The responsibility for developing and communicating the plans for the school-wide Deck the Halls activity, for example, was given to the group even though this activity was largely Mr. Plum's vision. Consequently, the group spent a great deal of time developing last-minute flyers and instructions to distribute to other classes in person and via email. There was subsequently uneven participation across classes in this activity, which may have been avoided had the group not been operating on such a difficult timeline.

Reflecting on all of these time-related challenges, Charlie suggested that:

We should have started in August. I wish I had been doing this in the summer so
we could have made a plan for what to do but the thing is it would have been hard
because we weren't in our placements yet...but if this had been a full year

experience, I think we would have been less stressed as far as time commitments and we could have been a little bit more thorough in some of our work. I think that we could have made Community Day happen if we had had more of a chance to push them on their end to communicate with us.

Although a summer start might have been too early given the field placement schedule, I agree with Charlie that an earlier start would have alleviated some of these challenges.

Nonetheless, in the absence of effective communication and partnership with school leadership, I suspect that similar challenges would have been faced regardless.

Juggling This Work With Other Obligations

As we engaged in ROCI, we all grappled with negotiating the multiple competing demands on our time. In addition to the day-to-day responsibilities of student teaching, the student teachers were enrolled in two teacher education courses and also had to complete the mandatory edTPA assessment. Danni shared, for example, that she struggled with the pressure of preparing for tests while also planning and enacting this continually evolving project with a collaborative group. Likewise, Bobbi shared that there sometimes did not seem to be enough time to complete coursework and collaborate with the group, adding "It's a lot of work on top of what I'm realizing how difficult is to be a day-to-day teacher...But this [project] is the thing I actually liked to do!"

As a doctoral candidate with other responsibilities as well, I also struggled with the amount of time this collaboration required and had to make difficult decisions regarding when to devote extra time and when to ease off. The inquiry group meetings, observations, emails, text messages, and phone calls required to support the student teachers, stay on the same page, and plan for next steps were at times cumbersome.

Although it ebbed and flowed, there were weeks when my role in this work felt like my full-time job, rather than one responsibility among many.

Since there was so much to do and we felt continually behind, it was tempting at times to want to schedule more inquiry group meetings or make them longer. Due to the competing demands we were all contending with, however, this was not possible. As a result, we had to make difficult decisions about what to discuss and spend our time on. For this reason, I had to do away with my original plan to set aside time in each inquiry group meeting explicitly discussing challenges and benefits they were experiencing. Our meetings were so full of urgent reporting out, debriefing, and planning that there simply was never enough time to do this. Similarly, while I had hoped that student teachers would maintain reflective logs relating the research questions, it became quickly apparent that this was neither practical nor fair given the other obligations they were under.

Collaboration

As a group, we faced a few challenges relating to collaboration. Finding ways to communicate within the group outside of inquiry group meetings was especially challenging. Additionally, differences in working style within the group occasionally led to frustration and disagreement.

Communication Within Our Group

I struggled throughout our collaborative inquiry to establish norms for communicating between inquiry group meetings. As the student teachers progressed through Phase 2, the plan was continually evolving, especially as we received feedback from other stakeholders (students, administration, mentor teachers, etc.). Since I was not routinely in the school on days that were not designated inquiry group meetings or

observations, I struggled with not being able to "see" everything and the uneasy feeling that I was not fully aware of shifting plans and decisions being made. In one researcher memo, for example, I wrote: "I am feeling out of the loop. One of the challenges I had not expected was how out of the loop I would feel when they were up and running."

As we transitioned into Phase 2, I realized that I had grossly underestimated the evolving nature of this work and as such, had no concrete plan in place for how to remain up to date on what the student teachers were actually doing. My requests for brief updates via email and text message were inconsistently responded to, which was no doubt a byproduct of the busy schedule and multiple responsibilities the student teachers were coping with. Nonetheless, this uneven communication resulted in my feeling somewhat disconnected. In a researcher memo from early in Phase 2, I expressed concern at the "lack of follow-through in our group's Google doc planning" for the meeting with Ms. Pat but also mentioned that I made a "purposeful move not to jump in at the 11th hour and instead give them the responsibility for preparing for the meeting" since I was trying to take up "the challenge of letting go of the reins."

This arrangement, however, also resulted in a great deal of time spent in inquiry group meetings on simply filling me in on the status of the work, which I felt could have been better spent critically reflecting and planning for next steps. Towards the end of Phase 2, I began experimenting with different strategies to communicate with the group. This strategy will be discussed in greater detail in Chapter 6. Nonetheless, this challenge highlights the central role that effective communication plays in collaboration and, for this reason, the importance of establishing norms for communication when collaborating with others.

Within-group Differences

Although the four student teachers engaged in this collaborative inquiry had worked together before and had strong rapport, differences in their teaching style and pacing occasionally presented a challenge for group members. The first inclination of these differences became apparent in our extended planning session in January when the group had to tackle the difficult task of turning their abstract vision into specific activities for certain days. As they began to brainstorm how to launch their project in the classrooms, each student teacher offered thoughtful suggestions. When it came time to commit to writing something on the pacing map, however, they struggled to reach a consensus. At this point, Danni asked an important question---How important is it that we do exactly the same thing? Although the question seemed directed at me, I asked the group what they thought, to which Ray responded that she thought it was important that they have the same goals and maybe similar activities but that it didn't seem like everyone should have to do it exactly the same way. I responded that this seemed like a fair arrangement, after which the group proceeded with pacing out possible activities with the knowledge that it may look different in different classrooms.

The investigation phase of the project provides a great example of this arrangement since the student teachers each approached the task of collecting data and analyzing survey results differently---ranging from tallying responses as a whole group to creating stations to having designated individuals collect summary results. In this way, the student teachers tailored the activities to their teaching style. Additionally, since they were engaging the students in informing next steps as well, asking for their input in

determining how best to proceed, they were also able to readily take up student suggestions rather than feeling tied to a scripted plan.

This arrangement, while ideal from a responsiveness perspective, sometimes created problems with regards to pacing, however. Since the group had decided to engage all four classes in a shared social action project, this required them to stay relatively on pace with one another. They had identified designated points in the project in which classes would work together---sharing initial ideas, compiling the master "dream list," and reorganizing students into interest groups to take action on individual ideas.

Consequently, although they had the freedom to approach each activity differently, they also needed to reach similar end points at similar times. Due to differences in teaching style, however, this meant that some classes were occasionally waiting on other classes to finish and others feeling pressured to rush.

Danni was most commonly ahead of the other classes and, as a result, even though her students were ready to move to the next step, she felt compelled to create additional activities to give others time to catch up. In contrast, Ray tended to want to linger in discussions, fleshing out ideas and considering multiple perspectives as much as possible. And, as was described previously, Charlie and Bobbi each experienced challenges associated with their mentor teachers, which in turn hindered their ability to progress as quickly as anticipated. The absence of Bobbi's mentor teacher during a large chunk of student teaching left her at times overwhelmed and struggling with some management issues while Charlie's teacher limited the amount of time she could spend on the project. As the one who was most often waiting for other classes to catch up, Danni shared the following in her final interview:

I'm, like, okay let's go, let's go, and I like to stay on a target. When we have a goal, I want to stick to the goal because it gives me anxiety when we don't. So it's a difference in style and commitment to deadlines. And then, on top of that, I also had a much more lenient placement than some of the others and I know that. But it was frustrating at times when you're ready to move forward and you're kind of stagnant, floating around waiting for everybody else to catch up. But it is what it is and I don't think anybody did anything on purpose. I think if somebody didn't get something done it's because something happened that was out of their control. Absolutely, But yeah, it was definitely challenging.

While differences in pacing are not surprising and were anticipated, this challenge was amplified by the sense of urgency created by the previously described time constraints and interruptions. Since the group felt behind schedule for the duration of the project, making allowances for the teaching style of others was sometimes more difficult, resulting in occasional disagreement about what to cut, what to rush, and what was worth taking our time with.

In addition, the group also grappled at times with the reality of occasionally having to, as they put it, "pick up slack for each other." Although they were in the same teacher education courses, throughout our collaborative inquiry, each student teacher had a different capacity for stress and would reach their breaking points at different times. Danni shared, for example, the following observation: "All of us have different stress management styles and the more stuff that was added on, some of us are like 'cram through, keep going, keep going' while others are like 'I'm shutting down now.""

To deal with this, Ray shared that "there were times when somebody would pick up more of the slack then somebody else and that was because we all were hitting walls at different times so we were able to." The group members responded differently to stress, however, which meant that in some cases, some group members were doing more to drive the work forward than others. One group member demonstrated a tendency to disengage when feeling overwhelmed, for example, occasionally missing meetings and not responding to group texts or calls. In these instances, the burden was not shared evenly, which placed undue stress on the other group members. These challenges reveal just how central collaboration is to the work of teaching in the middle school concept. The finding that even this group of close colleagues struggled at times also suggests that effective collaboration is a complex task that needs to be explicitly taught and refined over time.

Conclusion

In this chapter, I discussed five challenges associated with participation in Reform-Oriented Collaborative Inquiry. First, reform-oriented student teaching was made difficult by a disconnect between College of Education and field placement visions of teaching. This disconnect was apparent in limited school implementation and understanding of AMLE characteristics as well as perceived resistance to "new" ideas. Secondly, the student teachers faced challenges associated with being "just an intern." These included variation in mentor teacher expectations as well as mixed messages from various stakeholders regarding what it means to be a student teacher. Third, the student teachers struggled at times to cultivate student engagement in "new" teaching approaches. The student-driven social action project they developed especially challenged the group

to develop ways to convince the middle school students that their voices were important. Additionally, in the implementation of this project, the student teachers faced multiple teaching challenges associated with facilitating a student-centered learning environment. Fourth, as we engaged in ROCI and attempted to implement the innovation, the group faced challenges associated with time. These included coping with multiple interruptions and compromised timelines as well as juggling this work with other obligations. And lastly, as a group, we faced challenges associated with collaboration. Maintaining effective communication within our group was especially challenging and within group differences occasionally made collaboration difficult. In the following chapter, I discuss four benefits associated with participation in ROCI.

CHAPTER 6: BENEFITS EXPERIENCED IN ROCI

In this chapter, I report my findings for the second research question from Study 2: What benefits, if any, did our group experience through participation in ROCI? The four benefits discussed in the following sections are 1) ROCI supported the group in reform-oriented innovation, 2) increased understanding and confidence in reform-oriented teaching practices, 3) relationships with students, and 4) new insights for the teacher educator.

As was explained in Chapter 5, the challenges and benefits associated with this work as well as the resulting strategies developed are closely intertwined. Some challenges, for example, made specific benefits possible (e.g., grappling with the challenge of "cultivating student engagement in 'new' teaching approaches" allowed the students to develop "increased understanding and confidence of reform-oriented teaching practices"). Likewise, all of the strategies, which were developed in response to challenges, were also benefits since they contributed greatly to our understanding of what it takes to participate in middle level education reform as a teacher, specifically a student teacher. For organizational purposes, I have chosen to devote a separate chapter (Chapter 7) to the strategies developed and focus in this chapter on the other benefits.

ROCI Supported the Group in Reform-Oriented Innovation

As the group engaged in Reform-Oriented Collaborative Inquiry (ROCI) and experienced the challenges described in the previous chapter, the collaborative inquiry group created a vehicle for additional support for the student teachers. Most notably, through collaboration, the group was able to create and enact an original reform-oriented innovation: the social action project, which was described in detail in Chapter 4. Beyond

the creation of the innovation, however, the ROCI process was supportive of the interns' work in the following ways: 1) ROCI was en-"courage"ing, and 2) ROCI reminded us of our reform-oriented commitments. This support yielded benefits for the student teachers as well as for me, the teacher educator involved, both of which will be discussed in this chapter.

ROCI was En-"Courage"ing

The challenges described in the previous chapter reveal how stressful and complicated challenging the status quo can be for student teachers. Participation in ROCI, however, offered a venue for much-needed encouragement in multiple senses of the word.

Firstly, ROCI seemed to offer a sense of much-needed comfort to group members. As we faced challenges through each phase, our ROCI meetings as well as the numerous phone calls and email/text exchanges created a space to debrief, brainstorm, and support one another through the tense circumstances we were often navigating. Although there was sometimes nothing we could do about individual incidents, the student teachers seemed to need and benefit from an opportunity to simply talk through what they were experiencing with me. For example, while reflecting on the tense incident she experienced with Ms. Pat, Danni shared that "Even though it was still extremely awkward and really inappropriate, I think that being able to talk to you about it and having you backing me was a big help on that." Similarly, in inquiry group meetings, as the student teachers would share challenges they were facing, the group would routinely offer affirmation (e.g., "That sounds horrible," "Yeah, that happened to me too"), compassion (e.g., "That was so wrong---I'm sorry that happened to you." "How can we

help you?"), and hope ("Even though it's not perfect, these kids are doing amazing work!" "Listen to what this amazing kid did!").

Etymologically, to encourage can also be understood as "to make strong, hearten" (Harper, 2014). This was also true for the group since the support provided through ROCI gave us the courage necessary to be bold and resolute, at times resulting in the student teachers daring to act boldly in reform-oriented ways in which I was hesitant.

The first indication of this phenomenon occurred in the beginning stages of brainstorming what kind of an innovation the student teachers might want to develop. As was described in Chapter 4, I made a point as we brainstormed to repeatedly emphasize that they should focus on do-ability and could choose something small scale (e.g., investigating the impact of providing students with several choices of authentic assessments). Nonetheless, based on their own interests and the input of their students, they were committed to the creation of the student-driven social action project described herein. This project was a bold choice not only in that it was extremely complex, involving many moving parts and stakeholders, but also in that the topic of the project required the students and student teachers to take on broader systemic school issues that were decidedly political and contentious.

Through collaboration, I also noticed that the student teachers seemed to build on one another's excitement, daring to tackle some of the big ideas in the middle school concept in ways that were both innovative and bold. Reflecting after one of our initial group meetings, I wrote the following in my researcher memos:

I wonder if this process gives preservice teachers the courage to challenge the status quo in ways that they might be otherwise afraid to initiate. There seems to

be comfort in the collective space of our inquiry group meetings and this comfort seems to generate bold ideas.

This thinking was in turn confirmed by comments such as this one from Bobbi:

This has made me realize how important it is to make alliances with other teachers because there's strength in numbers. Like Charlie helped me think through this by just having conversations with each other. It doesn't have to be planning together but can be looser than that. We inspire each other. (Bobbi)

As their innovation took shape, I found myself struggling at times between my desire to protect them (thus insisting that they scale down) and my commitment to supporting student teachers in enacting reform-oriented visions of teaching. Admittedly, I felt somewhat nudged out of my comfort zone in that I do not think I would have been so brave as to take on these issues as a first year teacher in a new school, not to mention a student teacher. Their enthusiasm was contagious, however, and in turn inspired me to find ways to help them implement their vision. Likewise, the student teachers would occasionally comment in our inquiry group meetings (especially when we were discussing political challenges) that they were comforted by our meetings and my support. This comfort in turn helped them persist, as was evident in this comment from Ray at the end of one inquiry group meeting: "If I didn't have you, I would not be doing this." In this way, through collaboration, we inspired each other.

Beyond debriefing, the inquiry group meetings also created a venue to co-develop strategies for navigating some of the challenges the student teachers were facing in regards to teaching and school politics, both of which will be discussed in greater detail in future sections.

ROCI Reminded Us of Our Reform-Oriented Commitments

In all phases of ROCI, as we strove to set-reform-minded goals, adjust responsively and maintain our reform-oriented vision, our meetings provided an opportunity to explore resources tied to the AMLE middle school philosophy. In Phase 2, for example, once the student teachers had identified which specific reform-oriented characteristics to focus on, I identified and sifted through resources tied to these characteristics, emailing an annotated list of links and sharing this in inquiry group meetings. As the innovation began to take shape, I did the same for resources related to "positive school culture" in middle school and reminded the student teachers of key resources relating to community-based learning and the IPARDC process we had previously explored in my course.

In keeping with what was discussed in the previous section, these professional resources also seemed to be encouraging in that they placed the work that the students were doing in a broader national context and connected their innovation with the professional literature. When learning about the ways in which other schools were promoting positive school culture, for example, the student teachers would often share their surprise in learning what other schools had in place. During an early session in which I shared several resources regarding their emerging focus of "positive school culture," Danni laughed and reflected "I always feel amped up after these sessions...then I go to school and am, like, ugh." While the second part of this statement is further evidence of the disconnect the student teachers struggled with, the first part indicates that the resources were nonetheless inspiring. The exploration of these professional resources

thus provided a means to affirm student teachers in their principles despite challenges they may be facing in their current situation.

Additionally, multiple practical teaching moments arose during inquiry group meetings as we progressed through the phases, which in turn provided me with an opportunity to offer "just-in-time" support and resources for student teachers. In planning the social action project, for example, we revisited some of the fundamentals of backwards design, which led to practical instruction regarding topics such as flexible planning for negotiated curriculum, scaffolding student participation, how to "make it work" despite problematic time constraints, and stretching and shrinking phases of the project as needed. The following excerpt, which took place during an early inquiry group meeting, provides one example of the kind of exchange:

Jessica: It strikes me that these things are kind of difficult to just go online and research, like how do you create a positive school culture? I sent you guys out those links because I was wondering what would happen if a kid went in and typed "How do you create a positive school culture?" into Google (like 90 percent of them are going to do) and it doesn't pull you up a lot of really helpful stuff.

Danni: Yeah my kids did that.

Ray: No it doesn't and it's a lot of teacher articles.

Jessica: Right so that's an argument for why it might be good to pick some---

Danni: Resources and give them to them?

Jessica: Right. And let them dip into the ones they like.

These exchanges allowed us to make explicit connections between some of the teaching challenges they were facing and other teaching practices (in this case, scaffolding). In so doing, as will be described in more detail in further sections, the student teachers and I learned a great deal about the kinds of moves necessary to create and sustain a student-centered learning environment.

Likewise, the student teachers would often share resources with the group as well as ideas regarding teaching approaches associated with student-centered instruction. The student teachers would often reference readings they had completed for other classes as well as resources they had located in their own research, emailing links to group members who expressed an interest. Since each student teacher was adapting their daily I/E period activities to their students and individual teaching style, the student teachers would also naturally share the particulars of their approaches to certain lessons in inquiry group meetings. This, in turn, would reveal new teaching methods and tools. For example, when the student teachers initially sought the input of their individual classes regarding issues that concerned them, they took different approaches to collecting this input. While Charlie and Bobbi wrote the questions on the board and had the students write their responses on index cards and loose leaf respectively, Danni developed a simple graphic organizer, and Ray used an online survey tool called **Poll Everywhere**. This presented an opportunity for us to discuss the benefits and drawbacks of each approach, which assisted the student teachers in refining their work:

I think that the meetings that we had talking to each other about what we wanted to do within our respective I/E classrooms were really helpful. And having

conversations with the other interns about my lesson ideas and how to make them better was really important to me.

Similarly, as student teachers would bring up concerns, the other student teachers would also offer suggestions. The following excerpt is from a meeting in which Bobbi was looking for ideas for how to help her seventh graders make progress during the investigation phase of the project. The exchange illustrates this dynamic sharing of ideas and resources in our collaborative planning:

Jessica: One strategy might be, I liked how Danni was saying that you might send a few kids over to say "Hey we're done---we're waiting on you."

Bobbi: That's great...I also am thinking some of them need something else to do.

Danni: I think all of them need to participate in the investigation in some way.

Bobbi: Well they all have at this point but they're so different, they're fighting, they're still struggling to see who the leader types in the group will be...there's struggles there.

Ray: So what I'm going to do because they need some more guidance is I'm going to come up with a rubric type thing of "what does your program description need to have in it?."

Charlie: And I also had them start looking up resources on what positive school culture is.

Danni: Yeah we came up with our own definition. We found a bunch of other people's definitions and then we made our own.

Through this discussion, Bobbi was provided with multiple suggestions for the kinds of activities her students might engage in during the investigation phase. Additionally, she was also cautioned by Danni against only having some of the students participate, a point which will be revisited later in this section.

Engaging in ROCI also brought forward many important tensions between the competing demands of reform-oriented principles and school expectations. As we attempted to innovate in ways that were responsive while also maintaining our reform-oriented focus, our inquiry group discussions touched on the following tensions:

- Tension between the pressure to raise test scores and commitments to developmentally-appropriate instruction and other purposes of schooling (e.g., democracy education)
- How do I share power with students yet maintain my authority?
- Who gets to decide what we teach---students, teachers, curriculum developers, administrators, county officials?
- Do we ignore tenuous topics in schooling (e.g., bullying, inequity) or do we address them directly?
- Tension between desire to have power in decision-making and desire to build relationships and be liked by other grade level team members
- In this era of high stakes testing, how do you prove the value-added of work that is aimed at socio-emotional and school environment goals?

Through discussion, our inquiry group created a space for us to navigate these tensions together. Indeed, our inquiry group meetings seemed at times to prevent us from losing sight of the principles and reform-oriented vision that undergirded this work. The

following excerpt from a discussion at an inquiry group meeting, for example, illustrates how the group members would offer each other support when frustrated but also help one another stay on course with goals.

Bobbi: Do you guys think that, with the people who are like that, because I have some that don't seem like they want to be there at all. Is it okay if we say "Then don't be in it" because my other teachers will take them, they've already said they can come to me for I/E period but if they really don't want to be there, can I say you can go?

Ray: I would give them more time. Let them hang out a bit more. Like I said, the data collection was the, it was pulling tooth and nail for me.

Others: Yeah.

Jessica: Yeah I think that the problem is you're not starting---I mean you guys have done a great job of presenting it in an exciting way---but it also became academic really quickly with the tallying.

Danni: Yeah.

Jessica: So I think that when it gets to the creative element, let's see.

Bobbi: Yeah.

Jessica: And if you really feel like they are starting to get in the way then let's have a conversation before you make a decision.

Bobbi: Yeah and I mean I'm not going to be like "GO!" but I'm just thinking for them too, they don't want to be there.

Danni: I told Bayla today that, you know, if she really really wasn't into it and that it was going to be some big thing that I was forcing her to do then remember---I always try to remind them why they're doing it.

Bobbi: Yeah me too.

Another illustrative example of this phenomenon concerned the temptation that often arose in the group to make big decisions about the project without seeking the input of the students or providing opportunities for student choice. Since we were developing this student-driven project as part of a commitment to active, or hands-joined, learning, we all occasionally needed reminders to involve the students in the decision-making process when possible. This excerpt offers one example:

Ray: So here's what I'm thinking---you know how we started this whole thing with the Kid President pep talk? What if we had the kids---

Danni: Create their own pep talk! Aw that would be so great.

Ray: So if they make their own pep talks and they're talking about how to initiate change in their pep talks, then they're reflecting on everything that they did and they're applying it and creating---the highest level of Bloom's taxonomy.

Jessica: So the tricky thing with having them create one pep talk since there's so many individual students involved is---

Ray: No I meant one pep talk per small group.

Bobbi: We could even show it at the Spirit Week assembly or something.

[More enthusiastic brainstorming about this possibility]

Jessica: Okay. So then I guess my only other advice is that whatever they create

for their final, my advice would be that they're involved in thinking about what that would look like as part of our commitment to active learning.

Danni: Absolutely. It's an idea but---

Jessica: Something that I have seen work really well and is tied with active learning and choice is if we come up with a shared set of shared guidelines for what would need to be in there, like maybe there needs to be some sort of a motivational part, some sort of a take-away, but that they get to choose the format. Or if they all love the idea of everybody doing a pep talk, that's awesome. But have the freedom, if they want to take it in another direction, be open to that so long as it conforms to the same general guidelines.

Danni: Yeah let them reflect however they want.

Jessica: And we need to think about what objectives are being bundled into that final.

Ray: I definitely think providing evidence and supporting a claim.

Danni: Let's look at the list we made.

Jessica: If you send that final list out to the group, I'm happy to play around with creating a draft knowing that it would probably change. Some sort of a loose overview of what would need to be in there to meet the standard.

Ray: And I want to probably present it in a different way because I worry that that might take out their motivation. We talk a lot about their legacy as eighth graders---what do they want to leave behind talking about this project for future students who want to promote change in the school?

Charlie: Yeah I don't think the pep talk would be exciting to my students. I got a lot of eye rolls about the Kid President.

Jessica: So what if you just asked them that question---what do they want to leave behind talking about this project for future students who want to promote change in the school?---and let them decide?

Charlie: Yeah that makes sense.

Through this discussion I was able to remind the group of their commitment to incorporating meaningful student choice and voice in their project. Although the group was initially excited about the pep talk idea, my reminder quickly shifted the conversation into one in which the pep talk idea was viewed as a choice. This in turn opened the door for Charlie (who had been silent up until that point) to express her misgivings that the pep talk idea would interest her students. Charlie's feedback thus reaffirmed the importance of choice since it provided further evidence that one assessment may not address the needs, strengths, and interests of all.

Increased Understanding and Confidence in Reform-oriented Teaching

In their post-interviews, the student teachers reported that participating in ROCI contributed greatly to their understanding of and confidence in how to enact reform-oriented practices, especially as it concerns the facilitation of a student-centered learning environment. This benefit was evident in the following ways: 1) learning how to actually *do* this, and 2) developing a habit of mind.

Learning How to Actually *Do* This

While participating in ROCI, the student teachers developed pedagogical knowledge regarding the enactment of reform-oriented practices. Specifically, the student

teachers developed a deeper understanding of how to cultivate student engagement and how to facilitate "hands-joined" and active, purposeful learning. The following section relies mostly on quotes from Charlie and Bobbi. Although Ray and Danni voiced similar sentiments in inquiry group meetings, Charlie and Bobbi spoke at length about this benefit, citing multiple illustrative examples in their interviews.

As was discussed in Chapter 5, the student teachers faced several challenges relating to cultivating student engagement. One of these challenges involved convincing their students that their voice was important while also dealing with the mixed messages they were receiving from school faculty regarding their support of the work. To navigate this tension, the student teachers chose to make no promises but to emphasize instead the importance of self-advocacy and making your voice heard, even when there are no guarantees. As such, this social action project became a symbolic lesson in how to challenge and/or change the status quo. To this end, when the students became overly negative or felt frustrated or disappointed, the student teachers would offer them empathy but would also emphasize the importance of persistence, respectful communication, perspective taking, and compromise. Ray was especially passionate about this and offered many examples in our inquiry group meetings of the ways in which she was embedding life lessons that were bigger than just this project. Here is one example excerpted from an inquiry group meeting:

I'm struggling with getting them right now to positively think of programs that we could do. I had a group of kids who just stood there for a half hour today going "Oh the chicken is whack, we need different chicken. It's not cooked all the way." And I'm like, that's not constructive, you need to think of constructive ways...so

today I talked about symbiotic relationships as our warm-up thing. I talked about Finding Nemo and the anemone and how they both work well with each other.

That's what the students need to do with the administrators so our programs need to be positive for both.

In an effort to help students see that the school administration could be an ally, Ray, Charlie, and Danni also placed great emphasis on perspective taking in their discussions with students. The following excerpt from our final group meeting provides some examples:

Danni: I had this talk with my students several times---Before Mr. Plum is anything, he is a human being and all people like things a certain way and you need to understand his perspective and how we could work with that.

Just trying to get them not to hate the administration so much, which was difficult because I also didn't like them very much.

Charlie: Yeah, just getting them to see the administration's point of view---

Danni: Right, and making them see that their actions are usually what fuels the administration's actions. Just trying to help them see that they're not entitled to being treated perfectly all of the time when they're not perfect. It's a cause and effect both ways.

Encouragingly, these broader lessons in how to effectuate change were later evident in the "lessons learned" shared by middle school students in their final reflections (described in Chapter 4).

The student teachers also faced the challenge of cultivating student engagement in reluctant students. To navigate this challenge, Charlie experimented with different ways to support students in making strategic choices:

Encouraging them to gear their research towards things that they were interested in themselves helped a lot. Like I had that group of boys for the Spirit Week Deck the Halls decorating that was not at all interested in researching their assigned university because no one had heard of it and frankly they didn't care about it. But you know, I asked them what they would like to research about the university, and they were all like "sports!" and I was like "Fine, tell us all about sports." I think that helped a lot. And just asking them what kinds of things they're going to look for when they research colleges and having them research that. It made it more relevant to them. In general I tried to allow for choices as much as possible.

Charlie further illustrated how she supported group work by circulating among interest groups to help them get started:

I put them in groups and went around to each group. So I asked them "What do you guys want to do?" and then kind of specifically told them what their group needed to do from what their ideas were. Because each group had something different they wanted to do, working with them in small groups was a lot easier to give them some sort of direction especially when they're given choices for different methods.

Ray also shared the ways in which she would capitalize on the enthusiasm of some students as a means to inspire others:

Luckily I had a few students who were always willing to give ideas. So I tried to get all of the students to give ideas. I said I really loved when they do give them.

And Cassie [one of her students] was amazing with the fact that she followed everything exactly how I would love every students to do for this. She knows what active learning is and appreciates it so anybody working with her was able to see her appreciation for it and also appreciate it.

These examples demonstrate how the student teachers, in implementing their innovation, were able to experiment with a variety of methods for supporting students in student-centered instruction.

In regards to hands-joined learning, Bobbi reported that a clear benefit was "the collaboration between me and them," providing the following illustration of the approach she developed to establishing the teacher's role in facilitating hands-joined learning:

For this project it was different than when I was teaching because when I was teaching, I was seen as the person who knows all of this stuff and they would treat me as such. But in this I really stressed from the beginning that this is their project and I'm here to help them. And that's why when I would talk to them about this kind of stuff, I would sit at the tables with them. I would make a point of sitting down with them to either listen or just talk. In the beginning I would have to prompt people because we would be talking or they would be talking about something and then they would start just addressing it to me and I would say "Oh no, talk to your group. I'm just here." I would try to stress the point that I'm here to help but I'm not here as a teacher. I didn't want them to have that dynamic.

And it would help because a handful of students started to express themselves and became more confident so this definitely boosted confidence for students.

Once again, these examples demonstrate how the emphasis on hands-joined learning in the group's innovation enabled Bobbi to experiment with some simple yet powerful teacher moves (sitting with students, listening, and scaffolding student talk) to break down the predominant power dynamic. Notably, Bobbi also reports that these teacher moves were unique to the project, which suggests that participation in ROCI created an opportunity for this kind of experimentation that would have been otherwise absent.

In addition, Bobbi spoke to a developing appreciation for the balance between offering students the support they need while also acknowledging that engaging students in active learning also requires the teacher to allow a certain amount of struggle. She reflected in her post-interview, for example, that she realized in retrospect that she was taking some things for granted:

With the seventh graders, they'll sit there, like, what am I supposed to do? Some of the kids even said in their reflections, I didn't contribute much because I didn't know what to do. So again I was taking some things for granted, oh everyone knows how to go online and do research but you're 13, you don't know...

Yet she also reported that she was learning the importance of knowing when to let students struggle with complex problems:

Knowing when to be hands-on and hands-off, knowing when to help students and knowing when to let them struggle through it on their own. Because I have a tendency to want to rescue. When I see them struggling, I want to say "oh no, no,

let me help---" but I know that part of them learning this is, they're not going to really learn if I'm just there as their safety net all of the time.

The student teachers also reported increased confidence in their abilities to implement reform-oriented characteristics. A comparison of the student teachers' responses to the question *How prepared do you feel to implement the characteristics associated with the middle school concept?* before and after ROCI reveals some interesting shifts. Charlie, for example, spoke to a significant shift in her comfort level from the beginning of student teaching to the end:

Coming into this year I was completely overwhelmed at the idea of doing this (holds up AMLE characteristics) in my classroom. I thought it was going to be so difficult and honestly it was very difficult in my math placement and a lot of that had to do with my mentor teacher. But being in my science classroom where my mentor teacher was like "Do whatever you want to do" and I was like "ok!" and I just had all kinds of ideas and kept running with it. Yeah I just, I feel a lot more comfortable with this. I have a lot better idea of how to incorporate student choice. Especially in terms of giving them different methods to complete their work in, giving them options of making a powerpoint, diagram, paper, things like that. I felt a lot better doing that. And just letting them get creative.

Interestingly, in her pre-interview, Charlie shared that she did not feel particularly confident in her understanding of active, purposeful learning, stating that she had a "hard time envisioning how to implement student needs and interests into instruction and planning." When I read that excerpt back to her in her post-interview, however, Charlie shared the following reflection:

I think before my thinking was that everything had to be spur-of-the-moment when we're going to have to completely change our plans. But it doesn't necessarily have to be that way. You can plan for whatever material you need to cover but incorporate some of the students' ideas into it, adjusting your plans as you go. So like this project I have been doing with the kids on the food deserts, I had the general idea of where I wanted to go with it but the kids are taking it in their own direction for their group, for how they actually want to make it happen. So there's flexibility within your planning.

These articulations of the teacher moves needed to enact reform-oriented characteristics such as active, purposeful learning (e.g., providing choices, flexible planning) demonstrate considerable growth since this nuanced understanding of the characteristics was not evident in her pre-interviews.

Similarly, in her pre-ROCI interview, Bobbi shared that she felt least comfortable in "embedding choice with students" because it was very unfamiliar, elaborating that "I can imagine it, which makes it easier, but I haven't seen it." In her post-ROCI interview, however, Bobbi reported that "I feel much more prepared than I did earlier. This has helped me see how do-able this is from a teacher's perspective." And specifically mentioned that "embedding choice has gotten a lot better although it still can be tough because students don't know what to do."

Likewise, in her pre-interview, Danni responded "I give myself a 6/10 on a prepared scale overall. I know what I should do but I don't know what to do specifically." She also spoke about a concern that the curriculum could present a hurdle since "I have

little say to what the curriculum is; that choice has been made for me." In her postinterview, however, Danni shared the following:

I feel pretty prepared, especially with this experience. I don't think that every time I go to do something like this, it's going to be the same, especially considering where I plan to teach next year compared to where I was this year. I have no idea what it's going to look like but I know that I'm prepared to do it whenever it comes up. I feel like I have the knowledge to be ready to jump in as soon as I get my bearings. And I don't think this has to happen in ways that something needs to be changed, it could just be making something better. The curriculum might be dry and you need to spice it up...I still feel that the curriculum is given to you, it's handed to you but I feel that the hidden curriculum is a whole other thing and I feel more prepared to take that on. Now I would give myself an 8 out of 10 or 8 ½.

Ray also reported increased confidence in the characteristics, especially those that fell under the Curriculum, Instruction and Assessment category, explaining "I feel prepared to be able to effect change with all of the areas that I have control over (references Curriculum, Instruction and Assessment characteristics)." The distinction between characteristics under the teacher's "control" will be discussed in greater detail in Chapter 7.

Lastly, Danni and Bobbi shared that participation in ROCI assisted them in taking theory and principles of middle school philosophy and putting them into practice, a move which may explain this shift in confidence since it resulted in practical experience:

This was a valuable experience and very important work to me. It's so easy to sign up for something, you know what I mean? I believe that is awesome but then

to actually fully take the theory and turn it into practice. I think that is something completely different. Not everybody got a chance to do that. (Danni)

For me, I would relate it to future teaching. I see, again this is what I want my classes to look like and this has given me a little bit of practice into and exposure so I can see how to set that up in the classes from the beginning. (Bobbi)

Developing Habits of Mind

During post-interviews, I was surprised to notice that the student teachers would often slip in and out of discussing their reform-oriented work in I/E period and examples from teaching in other classes. Ray, for example, described the following activity she developed that was inspired by the "Science Friday" concept on National Public Radio:

During my placement I would do something I called "Science Friday" going off of NPR. Kids asked a whole bunch of scientific questions while we were in this one section and I didn't have a chance to answer them so we wrote all of them down on a list and then I found articles on them for the students to explore on that day.

Likewise, Charlie shared that she was able to provide students with a variety of choices for their third quarter math project, explaining that she gave them "options of making a ppt, diagram, paper, things like that...just letting them to get creative." She also spoke enthusiastically about a project she had developed in science class to learn about and propose solutions for the phenomenon of food deserts. In her discussion of this project, she revealed the ways in which she was adapting the IPARDC process to suit new goals in a different context:

Charlie: Project-based learning. I've become really huge on this whole developing

projects and having students go through this process of doing research and finding a solution. I think that my students in my science classroom right now are benefiting a lot from the emphasis that I'm putting on how to make an argument...

Jessica: And you're talking about the food desert project you created?

Charlie: Yes. Haha oops. I'm talking about Science class again!

Jessica: It's okay, it's relevant. And so I'm curious---are you using the IPARDC process for that? Is it loosely investigate, research, propose something...

Charlie: Vaguely. Yeah. It's based on that.

Jessica: So you're adapting that---you called it project-based learning, so you're adapting it to a project?

Charlie: Yes.

Jessica: With the goals of supporting them in making an argument and using evidence?

Charlie, Mmm-hmm.

Bobbi also provided another example of adapting the IPARDC process we used in the social action project to another context for another purpose:

Bobbi: I would connect it, like when I was in the 8th grade classroom, not specifically about our projects but kind of in order to assist with what we were doing in our projects. Like the social justice thing---the discussions that were happening, the dialogues, the research, like everything. Andrea (another teacher educator) gave us the idea to teach a lesson that has to do with social justice in your content and I took our version of our

community-based project, kind of like what we are doing here with having the kids do research---

Jessica: The IPARDC thing?

Bobbi: Yeah I integrated that. I made a lesson of that and it was a 5-day project.

So combining that since it's helping them with their skills for what we're doing for this and it's also helping them for life. Because this isn't just good for what we're doing.

Although these examples could be explained as simply being a carry-over from their teacher education courses, which certainly was a contributing factor, the following two excerpts from post-interview conversations suggest that there is something about the ROCI experience that aids in this transfer.

Excerpt 1

Jessica: It's interesting because the way you are talking about it I'm having a hard time deciphering what you did in I/E period from what you did in your other classes. So do you see a relationship between the two? Do you feel

like that had an impact on what you did in other classes as well?

Charlie: Yes! And that's what I'm really trying to get at. That even developing those relationships with my students helped me in teaching that class in the other subject. And it helped me better figure out how to make this work in a regular classroom that's not just the I/E period.

Excerpt 2

Jessica: To speculate, you have me wondering if you would have used this IPARDC cycle or active learning or any of that on your own?

Bobbi: I don't think, I probably would have used elements of it but to strictly come back to it, me personally I don't know that I would have. Because when I learn things, like I took a lot out of the class and I take a lot of things out of plenty of classes, but when I categorize them somehow I don't categorize them that way. It becomes a part of what I'm doing naturally but it won't look exactly like this. I wouldn't know where it came from and it wouldn't be the whole IPARDC process because I wouldn't have remembered all of it. And that's just me with the way that my memory is. When we talk about this stuff it will all come back to me then but when I'm functioning in my day-to-day there, when I'm sitting down to plan, I'm not like "IPARDC, let me do this." It's there, pieces of it are there, and it influences what I do. But this allowed me to really apply this and now that I have done this, now this is a part of my day-to-day. Again, I never think "oh IPARDC blah blah blah" but I know "Okay this then this then this." When I'm structuring a unit or lessons, it's completely there.

Jessica: You mean like investigating and exploring and then picking something and---?

Bobbi: Yeah because now it's a system. And it's become a habit for me is what

I'm trying to say. From having this to work on this whole time, it's

become a habit of mind at this point. And that's how things work for me,

is through getting out and doing them. And this really made me do it. And

I'm really happy for it...this gave me a great opportunity to put it into play with what I was doing.

These excerpts further affirm the previous finding that ROCI provided an opportunity for the student teachers to apply theory in practice. Furthermore, they suggest that this "learning by doing" was associated with a new "habit of mind" (in this case regarding the IPARDC process) that they carried over into planning and instruction for other classes.

Relationships With Students

Student teachers reported that by engaging in ROCI, and by extension the student-centered social action project they created, they built stronger relationships with their students, which led to new insights into student perspectives. In reference to the benefits of participating in ROCI, for example, Charlie asserted that "One of the big things was the relationship I developed with students." Likewise, Ray shared the following sentiment, which was echoed by the other student teachers in varying ways throughout the ROCI process:

I was able to make a stronger connection to the students that were a part of this process and that helped. I could see a difference with my instruction with those students compared to the other students and overall that was good.

Although it is perhaps self-evident that the student teachers would feel closer to the students they saw for an additional I/E period, Bobbi shared feeling that these relationships also bolstered relationships with other students:

I did have a better relationship with kids in my I/E period. Now I did carry over a lot of these characteristics into my other classes but I am closer to the students in that class. I feel more connected to them but since I incorporated it into my other

classes, I built that trust there too. I think what made it better was also just the relationship I built with the kids in the I/E period. I mean it doesn't just stay in the class, they go out of the class and talk about it. And that helps with my other classes. They know I am an ally and they can talk to me so I think that this whole process made all of that possible.

Furthermore, Bobbi shared that using the IPARDC process as a rough framework for the student-driven social action project was especially powerful in fostering these relationships since it provided a more structured way to be student-centered:

I think there are qualities that I like to think I have, where I am good with the dealing with people and kids, but this gave me a more structured way to incorporate that---not just being friendly, which is great, but I'm there to teach as well and the structure of this, for someone like we who is very scatter-brained and a lot of stuff is all out here and there for me, when I have something set in a system, something that works, then it kind of gives me something to rely on that I knew would work. Because my scatter-brained nature can get me lost sometimes but this really helped me to focus in and it helped my teaching too. It helped with this project but it helped with everything.

Beginning early in Phase 2, when the student teachers began collecting input from their students regarding issues that were of concern to them, the group began to report that they were "learning so much about students and their lives and concerns," much of which completely surprised them. This notion that this process supported the student teachers in developing new insight into student perspectives reappeared throughout the

work and in post-interviews. Charlie shared the following examples of how collecting and analyzing student reflections and feedback were especially illuminating:

Example 1: I didn't realize how much it meant to them to have that choice and have the opportunity to give feedback and to take that into account because they had never seen that before. It made them a lot more comfortable and that one comment on the reflection meant a lot to me---that she felt she had a better learning environment by having more input.

Example 2: It's shown me how much kids love projects like this. One kid was saying, actually a couple of kids were saying (gestures to reflections), that this is the most fun project they have ever done in school. This one, our project, not my food desert one.

Similarly, Bobbi shared that through the reflections, "It's like I'm getting a little picture inside their heads. Some of them just blew through it but others put thoughtful stuff in there. So it got me into what their mindset was." In reference to the role the social action project and related characteristics played in all of this, Bobbi shared how this work allowed her to get to know her kids better, which in turn built trust and empathy:

It really helps me get to know my kids better. You get to see what they care about. I get to see what they think about the world, what they think things are and see how they think about the school and I find myself identifying with a lot of what they say and it helps me have that relationship with them and allows me empathize with them and identify with them even more in my role as a teacher but also as a person. Once they trust you, I found once they started trusting me, they talk to me about things. They don't clam up when I get by the desk, you know?

So it kind of takes me back to what it was like to be that age and helps me in my interaction, helps with the teaching, helps with my interpersonal communication with them.

This reveals the ways in which their participation in ROCI facilitated structured reflection into student perspectives, which in turn led to new insights regarding students, teaching and learning.

New Insights for the Teacher Educator

As the teacher educator in our group, participation in ROCI led me to numerous new insights regarding how to support student teachers in innovating in ways that are responsive and emphasize do-ability. As was described in Chapter 5, as the teacher educator, I experienced two challenges throughout ROCI: 1) feeling occasionally pushed out of my comfort zone by the boldness of the group's choices, and 2) challenges associated with communication with the group, which resulted in the unsettling sense that I was out of the loop. In navigating these challenges, I experimented with a variety of approaches, which in turn resulted in new insights regarding working in the theory/practice space, communicating with student teachers, and relinquishing control.

Working in the Theory/Practice Space

As the teacher educator in this work, I found that participating in ROCI challenged me to navigate the theory/practice space alongside the student teachers. At times, this was admittedly uncomfortable for me. As I have already discussed, contrary to what I had originally presumed, I was surprised to discover early on in our collaboration that the student teachers tended to be more idealistic than me, daring to develop bold ideas aimed at creating large-scale change (i.e., a student-driven social action project

aimed at promoting positive school culture). In the margins of one of my early memos, I wrote "I am noticing that my role might be to keep things do-able as opposed to what I previously thought." I found myself advocating not only for reform-oriented theory (as I previously assumed), but also drawing on my experiences as a previous middle level public school teacher to maintain our focus on do-ability. The student teachers were navigating this same tension as they were extremely passionate about the AMLE vision yet kept bumping up against the realities of the school. While I felt at times compelled to protect them (in the same way that they wanted to protect their students from administration), I was also reluctant to squash their idealism. In this space, it was not necessarily clear to me exactly where the balancing point was. In the end, I made the decision to follow their lead and embrace their bold ideas, acting as an advisor of sorts, culling resources and offering advice as needed to inform the strategic implementation of their ideas.

In this role, I benefited greatly from the opportunity to sit in the space in which theory and practice were colliding. I learned a great deal about the practical side of establishing a student-centered, including which aspects were most confusing to the student teachers. Additionally, as has been previously described, I also learned a great deal about the naïve conceptions student teachers held about student-centered instruction and hands-joined learning. As such, this experience afforded me an opportunity to develop greater insight into the enactment of some of the reform-oriented characteristics espoused in our teacher education program, which in turn will influence the development of my teacher education courses.

Communicating with Student Teachers

I struggled throughout ROCI to establish norms of communication that were efficient and most likely to be successful. Since I was not in the school daily and the work would evolve and change directions so quickly, I grappled with the disconcerting sense that I was not fully aware of what the group was doing. My attempts at checking in and getting updates via email and shared Google documents were largely unsuccessful. As a result, we often spent a great deal of time at the beginning of inquiry group meetings catching up, which in turn resulted in limited time to plan and reflect.

To address this challenge, I began to experiment with new modes of communication. Since the student teachers were avid texters, for example, I began to initiate individual and group text threads to ask quick questions and check in. Although it varied across individuals, for the most part, this yielded a greater response, which I suspect is due to the relative ease of responding briefly via text. Similarly, towards the end of Phase 2, there was a day when we urgently needed to discuss the logistics for the final class celebration but were unable to meet in person. To make this work, I used text messages to agree on a time for a 5-way phone conference (using an iPhone) in which we could briefly discuss the plan from wherever we were at the time. The resulting phone conference was a very productive and efficient conversation, which left me wishing in retrospect that we had thought of this solution sooner.

Similarly, I was especially sensitive to the level of stress and responsibility associated with student teaching in our program and worried throughout this experience about overwhelming the student teachers. For this reason, I was committed to making our meetings efficient and reasonable in number. As we struggled to squeeze everything into

our meetings, however, I began to experiment mid-way through Phase 2 with spending most of the day at LMS on our meeting days. This allowed me to meet with the student teachers individually or in pairs for a portion of their planning periods prior to our inquiry group meeting. We would use this brief time as a means for them to inform me of their progress and raise any specific questions they might have. This arrangement allowed us to focus the bulk of our after-school meetings on planning and reflection rather than filling me in.

At around the same time, when the project was evolving rapidly and the student teachers were attempting to make meaning of the mixed messages they were receiving from Mr. Plum, Ms. Jones and Ms. Pat, I was surprised to find that the student teachers wanted to meet more rather than less. Since I knew they were juggling many responsibilities, I presumed they would be reluctant to have extra meetings. To the contrary, the student teachers seemed to crave more frequent but shorter meetings rather than a longer planning session every 2-3 weeks. Since this surprised me, in one of my researcher memos recorded after an inquiry group meeting, I wrote the following: "When I expressed a concern that our meetings might overwhelm them or hold them back from progress, they insisted we meet again next week!" This excerpt from Danni's post-interview further illuminates the ways in which my assumptions regarding their needs were different from the student teachers' perspective:

Danni: I feel like towards the end, we had much more small group meetings. I feel like towards the end you were there pretty much every week and I liked that. I liked that we were staying in contact with each other face to face because I felt like communication was a huge part of it so that was another

bullet point on my list....With communication, we stopped with the emailing and were texting and were calling frequently and, you know, you can't get ahold of someone so we do. Stuff like that.

Jessica: One of the issues in this work and I'll bring this up when we're in a group, is that it was awkward for me sometimes because I don't want it to be additive because I understand that you're juggling different obligations.

Danni: Yeah.

Jessica: And my perception is sometimes, I don't want to be there in their face or making them meet with me because that's taking more time from them and this is just one small piece that's totally voluntary so...but then at the same time, it seemed like it saved us time if we met in person or if I came in during planning periods.

Danni: No, I definitely agree and also doing the smaller chunks of stuff during our planning periods and I think that the small meetings, the more meetings, helped us make what we were talking about (stress) less, which was a lot more manageable.

After this exchange, I also made the following comment in the margin of the interview memo: "This is contrary to what I would have thought---maybe once up and running, more quick check-ins rather than formal longer meetings?"

These discussions reveal that while we had agreed to the inquiry group meeting schedule at the beginning of the ROCI process, as the work evolved, so did the needs and preferences of the student teachers. While I was initially operating from the assumption that meeting less frequently would reduce their stress, this may have been ill-informed. In

addition to establishing collaborative norms in Phase 1, this suggests that the teacher educator involved in ROCI must continually seek feedback from the student teachers and experiment with alternative modes of collaboration as needed.

Relinquishing Control

Early on in Phase 2, I began to realize that my frustration in not being up to date with the evolving work of the student teachers was on some level an artifact of my own predilection for control. Just as the student teachers were searching for the correct balance in hands-joined learning, I was searching for that balance in my role as the teacher educator in the group. Similar to the realization Bobbi had regarding her aversion to struggle and tendency to rescue, I made a conscious decision early on to attempt to relinquish control and resist the temptation to intervene when it might not have been necessary. As was previously described, I strove instead to assume the role of advisor to their vision, advising and assisting as needed but not doing the work for the student teachers. The following two comments from my research memos in January illustrate my thinking at the time:

1/14---I made a purposeful move not to jump in at the 11th hour tonight and instead give them the responsibility for preparing for the meeting with Ms. Pat. Part of the challenge seems to be letting go of the reins. I am aware that I am purposefully scaffolding them into independence so that I can "disappear" and they can continue with what they are doing in my absence.

1/27—There has been limited activity on our Google documents and very few email exchanges. I am feeling a little out of the loop and scared but part of this process seems to be about letting go of the control and trusting the instincts of the

participants and letting them take risks so I can know what they can do independently as well as what kinds of support they need.

While I am unsure of the student teachers' perspectives on this approach since it was a struggle of which they were largely unaware, I feel confident that the decision to support but not lead was an important one. Set alongside the finding that the student teachers learned by doing, for example, I am reminded that had I played a more central role in the planning and day-to-day logistics involved in this work, they would have missed out on a large part of the "doing." Additionally, since the goal was for these student teachers to carry these practices over into their future classrooms, their authority and ownership over the work seemed especially vital. I remain uncertain, however, as to the extent to which I struck an appropriate balance between controlling vs. hands-off and supportive vs. absent. With this in mind, I envision that future work might explore the blending of a gradual release of responsibility model within reform-oriented collaborative inquiry.

Conclusion

In this chapter, I discussed four benefits associated with participation in Reform-Oriented Collaborative Inquiry. First, as evidenced by the work described in Chapter 4, ROCI supported the group in developing and implementing a reform-oriented innovation. Participation in ROCI facilitated this innovation by providing encouragement and reminding us of our reform-oriented commitments. Secondly, the student teachers reported that participating in ROCI contributed to their understanding of and confidence in how to enact reform-oriented practices, especially as it concerns the facilitation of a student-centered learning environment. Some conversations suggested that participation

in ROCI might have created a new "habit of mind." Third, student teachers shared that their participation in ROCI and the resulting social action project enabled them to build stronger relationships with their students, which led to new insights into student perspectives. And lastly, in navigating some of the challenges I faced as the teacher educator in the group, I also experimented with a variety of approaches to supporting the student teachers. This resulted in new insights regarding the benefits of working in the theory/practice space as well as implications for the role of the teacher educator in Reform-Oriented Collaborative Inquiry. In the following chapter, I discuss one last benefit of participation in ROCI: the lessons learned by student teachers regarding what it takes to participate in middle level education reform as a teacher.

CHAPTER SEVEN

Student Teacher Insights into What It Takes to Participate in Middle Level Education Reform

Through participation in Reform-Oriented Collaborative Inquiry (ROCI), the student teachers developed strategies to assist them in navigating challenges as well as an informed understanding, based on their experiences, of what it takes to participate in middle level education reform as a teacher. As is illustrated in the following quote from Danni, the challenges they faced through ROCI led to the development of strategies, which were in turn perceived as benefits:

It was a benefit to experience the challenges we did experience with the resistance from the administration and the staff at LMS. I think that goes without saying that that's going to continue to happen no matter where you are, no matter what your job is, you're always going to deal with somebody in an upper level position and I'm just glad that I got the experience dealing with that. (Danni)

In this way, the development of strategies was a benefit unto itself since it led to new insight regarding what it takes to participate in middle level education reform. These insights, as Danni suggests, can thus be used to inform the work of participants during their first years of teaching and throughout their careers. This chapter discusses these student teacher insights, drawing on findings from the following research questions:

- 1. What, if anything, did student teachers learn about what it takes to participate in middle level education reform?
- 2. What strategies, if any, did the group develop to cope with the challenges they faced throughout ROCI?

Student teacher insights into what it takes to participate in middle level education reform include: 1) collaboration with multiple stakeholders, 2) strategic communication, and 3) flexibility and patience.

Collaboration with Multiple Stakeholders

The centrality of collaboration in participating in middle level education reform was a clear theme across interviews and inquiry group meetings. Student teachers spoke specifically about the importance of effective collaboration with three key stakeholders in education reform: 1) other teachers, 2) administration, and 3) students.

With Other Teachers

The student teachers identified collaboration with other teachers as especially important to middle level education reform since the ideas are so unfamiliar to so many teachers. This suggests that individual teachers need to work together to "figure it out":

I think that there should also be more of an emphasis on that collaboration because like I was saying, that team effort was crucial. Just helping each other figure it out because this is such a new thing and a lot of us are just not really sure about how to make it happen but I think that talking to other teachers helps a lot. (Charlie)

The whole thing with collaboration is so important to help you get some experience with it in a group setting, with your team of teachers. (Bobbi)

These assertions regarding the importance of collaboration were further supported by the ways in which the group leaned on one another (as described in Chapter 6) to debrief

around challenges and share ideas, a strategy which enabled them to collectively develop

bold ideas and new insights into reform-oriented teaching.

Charlie also underscored that having a team you work well with is especially important, as is evidenced in the following quote:

I think that having a team you work well with was huge. Because I worked really well with Ray and Danni and Bobbi. I think that helped a lot. That was a really good thing. I don't think you can make it happen without a team that you can work with who is, you know, all on the same side.

This of course speaks to the important variable of group synergy, which in our iteration of ROCI, was especially strong since the student teachers had developed a working relationship prior to our work and shared a similar interest in reform-oriented teaching. This will undoubtedly not always be the case. As has previously been discussed, Charlie struggled at times to work with her mentor teacher who she described as "having a very negative attitude towards the project." Drawing on this experience, Charlie reflected on the extent to which other teachers in the school can limit efforts to implement certain characteristics. In her post-interview, Charlie shared the following observation:

It's easy to do this in your own classroom but harder to get the rest of the school to do it. I thought it was going to be most difficult to work with admin but I was surprised that the most difficult people to work with were teachers.

To support this point, she cited examples of other teachers holding deficit views of students as well as the challenges of engaging her grade-level team in collaborative planning across disciplines, which in turn made teaming and integrated curriculum difficult. Nonetheless, Charlie offered the following advice for working with other teachers:

It's hard to figure out a way to make teachers not be intimidated when you're an intern trying to tell them what they should do in their classroom. But really I think it's just how you frame the, how you communicate with them, not just what you're communicating to them but how you approach them...I think you have to make sure that the attitude and how you're talking to them is not "I'm going to tell you how to teach," it's "Let's share ideas about what we can do in our classrooms" and "What have you done?" —inviting them to share why that works for them. Then also being like "This is what I do and this is what works for me and what I have seen my students really benefit from." And then inviting them to work together, not "I'm going to tell you how to teach, this is what you're going to do."

The difficulty Charlie experienced in collaborating with her mentor teacher and team, as well as the ways in which she felt this limited her ability to implement certain characteristics, reveals the ways in which the middle level concept hinges on successful collaboration. This finding indicates the importance of explicitly preparing teachers for and supporting them in the work of teaming and collaboration, especially as it concerns navigating some of the common challenges and pitfalls. Encouragingly, however, this discussion also reveals that despite these challenges in team collaboration, Charlie spoke of the benefits of her participation in the inquiry group. This suggests that collaboration among like-minded teachers who may or may not work closely together can be impactful. This, in turn, illuminates the importance of finding allies in the school even if they are not on your team.

With Administration

Due to the multiple challenges the student teachers faced in regards to the perceived resistance of LMS to new ideas and the confusing nature of the doublespeak they encountered, the student teachers developed an appreciation for the central role of the administration in determining to what extent the AMLE middle school concept is enacted in a given school. In her post-interview, for example, Ray responded to the question *How prepared do you feel to implement these AMLE characteristics?* with the candid response "I'm prepared to find a principal who will let me do this!," elaborating later that "From what I learned about politics in school, it will inform where I want to teach. These practices are really important to me so I want to look for leadership that will help me cultivate that."

While the student teachers reported feeling prepared to embrace the "Curriculum, Instruction and Assessment" characteristics in their classrooms (as was described in Chapter 6), their experiences illuminate the extent to which a teacher's potential to influence change in the other AMLE characteristics of successful schools hinged on the support of administration for similar goals. All four student teachers shared that they felt they had limited power to change "Leadership and Organization" and "Culture and Community" characteristics of the school. In her post-interview, for example, Danni shared the following:

I still stick with what I think I said in October---this is very do-able but everyone has to be on board. This (points to "Leadership and Organization" and "Culture and Community" characteristics) is not something that four interns can do. When you are in a position of power, it's easier but hard to do as an individual teacher.

While Danni's experiences with ROCI seemed to affirm her initial feelings regarding her limited power as a teacher, Ray, Bobbi, and Charlie demonstrated a shift in their thinking about middle level education reform from pre- to post-ROCI responses.

In her pre-interview, Ray did emphasize the importance of administrative support, stating that the "Leadership and Organization" characteristics are important to make the vision possible for the whole school. In her post-ROCI interview, however, she shared that the impact of administration was even more far-reaching than she had expected:

I don't feel like I have as much control anymore with "Culture and Community" characteristics as I did before. I can only invite the community in so much without permission from administration.

Furthermore, while Ray remained nonetheless adamant that the AMLE middle school concept was "do-able," she made a point to emphasize that "it's doable as long as the administration supports it on a school-wide level."

Similarly, in Bobbi's post-ROCI interview, I noted a shift in the way in which she was describing the teacher's role in middle level education reform, which led to the following exchange:

Jessica: In your initial description, I think there was no mention of admin.

Bobbi: I don't think I had run into them too much until then.

Jessica: Yeah when we listen back to this, it was more like, teachers try things and if they are successful, then the school will take them on but what I have heard you talking about today has seemed a bit more like---Yeah but you need the key stakeholders, you need to find a way to massage the situation

so that the key stakeholders see how this is in line with their vision or so you can maybe shift their vision a bit as well.

Bobbi: Yeah. Make them think of it as their vision. And I know you can do that with numbers. Of course I will have research to back it up but they don't want to read that. So if I have student work and can show "Look, this is how they did before and this is how they did with this assessment after." In this new way of thinking, Bobbi acknowledges, in ways that she had not before, the need for alignment between the administrator's and the teacher's vision. She also suggested that teachers must somehow prove, through student work data, the worthiness of "new" ideas as a means to gain administrative support, which once again represents a shift in her understanding of the power hierarchy in schools.

As was previously described, Charlie demonstrated a similar shift through her realization that other teachers could limit the implementation of certain characteristics beyond her own classroom. Nonetheless, she acknowledged that the "tone of the principal is important" and that Mr. Plum was "all about mixed signals," which arguably left the school and teachers with a lack of a unified vision. These shifts in thinking suggest that participation in ROCI, and by extension the insights described herein, were associated with a move from an idealistic view of teacher agency and simplistic view of school change to a more nuanced understanding of the role that power dynamics play in schools and education reform.

However, through their experiences working with an administration they perceived to be at times resistant, the student teachers developed several insights into how to navigate this challenge. In the following excerpt, for example, Bobbi spoke about

the importance of being fearless in the name of the larger goal of improving your students' learning environment:

Not being afraid of the administration, even if they are intimidating. I guess it goes back to resolve, just be firm, know what you're doing this for, this isn't about you. Your goal is to improve things for these kids for now and for later, to give them an opportunity to see what they can accomplish.

Charlie also reflected that she felt that she had made some assumptions in the beginning regarding the administration's openness:

Originally I went in and thought "Administration is going to fight us so hard on this, we're not going to be able to do anything, nothing is going to happen." But administration did really keep an open mind toward it.

To the contrary, Ray reported that she felt her assumptions regarding the goal of the school principal may have been overly optimistic:

Ray: I didn't realize---for me, the main goal of the day-to-day school is to help students learn and do things that's in the best interest of the student and I found out that that's not the main goal for a lot of schools in their day-to-day activities, which stinks, but it's still something that's good to know. So learning the politics of the school.

Jessica: So if the goal is not to help students learn, what would you say the goal is?

Ray: For their day-to-day activities? I don't know, the goal for Mr. Plum seems to be to make the school look good.

Although they represent markedly different perspectives, both of these realizations highlight how important it is to gain an understanding of the broader goals of the school and administration at the onset. This further affirms my assertion that in retrospect, as I have discussed previously, I should have insisted on a meeting with administration at the beginning of this work. This would have allowed us to discuss the AMLE middle school concept and hear from the administration regarding how they see this overlapping with existing initiative and goals for the school. Although the group's commitment to active and hands-joined learning would have required the ongoing negotiation of student and administrator goals, at least we would have been informed of the priorities of school leadership. Instead, we were left to draw our own conclusions based on conversations and observations by the student teachers. In light of the doublespeak perceived by the student teachers (described in Chapter 5), however, stated administrative goals in an initial meeting may not have been predictive of administrative actions and support as the work progressed. Nonetheless, an initial meeting would have allowed us to gather vital information and in documenting and following up on these initial conversations, create an idea trail that we could refer back to as needed.

These findings also suggest that if we hope to prepare teachers to be agents of middle level education reform in their school, teacher education curricula must explicitly address how to collaborate with administration. Likewise, contrary to the messages the student teachers reported receiving from Ms. Pat, student teaching must encompass active involvement in school reform efforts since, as Ray put it, "when you're a teacher in a school, you're supposed to be part of the school community and that's being part of the school community."

With Students

Through participation in ROCI and the development of their social action project, the student teachers also developed an appreciation for the extent to which collaboration with students is essential to middle level education reform. Prior to participating in ROCI, the student teachers largely overlooked the role of students in school reform. There was no mention in any of the pre-ROCI interviews of the importance of student participation in school change. Bobbi was the only one who mentioned students in her responses, stating simply that part of participating in middle level education reform is "living it in your classroom with your students." The challenges faced by the student teachers in actually doing this, however, suggest that they may have overestimated the extent to which students would be prepared or willing to participate.

Danni shared the following after listening back to her pre-ROCI responses to the question *How can teachers participate in middle level education reform?*:

The only thing I would add is that teachers need to get the students on board. A lot of this is teacher, teacher, teacher. So now just seeing how difficult it is to get the students on board---because really they're the ones that have the voice. Well maybe they don't have the voice but they can have it if they advocate for it so I think that if the students are involved with "This is where we are. We want a better education," I think that just really solidifies that there's going to be movement. It's like student education about education: where it is now, why it's that way, and where it should go. I think that the problem with a lot of the policies that have been put in place is that it's in the best interest of the students but the students have absolutely no input or understanding of what it is. They're just

going to school everyday. You know what I mean? They don't see how or why it's different.

In this reflection, Danni reveals that she has developed new insights regarding the problems associated with middle school students having limited voice in decision making regarding their own education. Likewise, she proposes that providing students with "education about education" could provide an entry into meaningful student engagement in school improvement, which could in turn lead to meaningful change.

Reflecting on her pre-ROCI responses, Bobbi shared a similar line of thinking, stressing that a meaningful move towards the middle school concept requires sharing power with students:

The only thing I would add to it is how it becomes possible is through sharing the power in the class. It's something that really hit home with me in Andrea's [another teacher educator] class this semester is letting the students know that their thoughts, their voice, their ideas are just as important, no, actually more important, than yours are in the classroom as the teacher. Just letting them feel like they are driving their education and I feel like by establishing that early, just by something as simple as "Let's set up the class rules. Let's do that together," just something to where they are given the opportunity to drive things, I feel like that can lead into things like this happening. They'll buy in because they feel a part of it and they'll feel like you are an ally instead of just an authority figure.

These reported realizations call attention to the importance of teacher-student collaboration in the notion of "hands-joined learning." The specific nature of this form of teaching also suggests that student teachers need to be prepared to not only believe in this

premise in middle school philosophy but also must be prepared to enact teacher moves that support this characteristic.

Strategic Communication

All four student teachers spoke to the importance of communication in the work of participating in middle level education reform. When asked what it takes to participate in middle level education reform, Bobbi immediately responded with the following:

Constant communication with the students and the administration. You know, this is what we are doing---what do you think about this? Just a lot of "what do you think? What do you think?" And that's on both sides, with kids and the administration, to get into their head and to get them giving it a thought other than a passing "oh yeah, sounds good."

Additionally, they each spoke to important lessons they learned about the kinds of communication that are most useful in collaborating, especially in ways that are politically sensitive. To navigate the challenges described in Chapter 5 regarding the "disconnect between College of Education (CoE) and Lakeside Middle School (LMS) visions of teaching" and being "just an intern," the student teachers developed a number of strategies for communicating with school administration in ways that promoted partnership and increased transparency. As a reminder, these strategies were developed within the context of mixed messages and uncertainty, which led the student teachers to feel that they were "tiptoeing" and "walking on eggshells." This suggests that the strategies were developed with the intention of protecting the group from further experiences in overstepping invisible boundaries (e.g., the incident with Ms. Pat).

As the social action project progressed and especially after the incident with Ms. Pat, the student teachers began to increase the frequency of their informal conversations and check-ins with administration. For Ray, this was a deliberate choice to avoid "getting in trouble":

Ray: For the school, I just started bombarding them with information. I went to Ms. Toolay and Mr. Plum with what the kids wanted to do for Teacher Appreciation Week. Told them about it, showed them the pieces, asked if I could make copies, all sorts of other things and they kept looking at me like "Why are you asking me permission?" but it was cool because I didn't get in trouble.

Jessica: So your strategy there was to keep them appraised [sic] of what you were going to do, keep them in the loop, but you already had this plan or vision of what it was going to be, right? So you were doing the work but you were just keeping them in the loop?

Ray: Yeah.

In this excerpt, Ray reveals her trepidation, illustrating a tendency developed reactively by the student teachers to over-communicate rather than the opposite, a choice which in this case was motivated in part by a desire to protect themselves.

For Bobbi, this communication was a purposeful move to build a relationship with the school principal, which she felt would make the administration more likely to be supportive and less likely to "stamp it out":

Bobbi: Another strategy again was just making my visits to the administration

more frequent, not even just regarding this project but other things. I would invent reasons or something I already knew the answer to. I would still go in to get that dialogue going and then mention something else in life or whatever. Just to get that personal touch in there. But those were some of the strategies for those challenges.

Jessica: So it sounds like you were trying to build a relationship by having more frequent interactions and then you would slip things in.

Bobbi: Yeah just making it so that when they see me, it's more than just 'how are you doing?'. I'm getting friendly. Mr. Plum will shake my hand when he sees me. Little things like that---I've really grown attached to what these kids are doing and I'm really looking forward to what these 7th graders could do next year. So that's what has helped me get over some of the fear of going in and talking to these people because I'm doing it because I hear them when the kids are talking and I'm like "Wow! That is so awesome!" and I want it to happen so what can I do? I'm trying to protect them in a way from the hammer coming down. So I want to make it so I feel like, and it might be an error on my part, but I feel like if I can get in and build a relationship with these administrators, make them feel something for me other than "just an intern" or "just a teacher"---I want them to see me as more than that---because then it's harder for them to simply stamp it out.

The student teachers also shifted from requesting meetings with the administration to simply stopping in the main office, a move which was informed by their observation that meetings such as the ones they were requesting were not in keeping with

the dominant mode of communication in the school. When asked if she was initiating the frequent check-in meetings she described, for example, Ray responded:

Yeah and it wasn't so much of a meeting as a stop-in. I think that might have been the problem with meetings. For them it's too big of a word, even though it could have just been a stop-in before.

This observation echoes my realization (described in Chapter 6) that communication with the student teachers was most successful when the norms of communication were informed by their preferences. In this same way, the failure of our numerous initial attempts to schedule a meeting with Mr. Plum may have been partially explained by the simple fact that this was out of step with the dominant mode of communication in the school, especially with administration. This again confirms that establishing preferred norms for communication among stakeholders is important early on (perhaps in one initial formal meeting) and should also be adjusted as needed as the work progresses.

All of the student teachers spoke about the importance of sharing the AMLE vision for middle school education with others. Danni, for example, jokingly referred to herself as an "AMLE evangelist":

Danni: This is the backbone of my philosophy at this point. I'm committed to making a school like this, you know what I mean? I want to---it's almost like that annoying religious person who's trying to get you to convert?

Jessica: An evangelist? Haha. You're an AMLE evangelist, is that what you're telling me?

Danni: Yeah I'm serious though. I'm just committed to, especially to these

(curriculum, instruction and assessment characteristics), which I think I have already said are much more do-able on an individual level.

Similarly, Bobbi spoke of the importance of sharing examples of "what's out there" with others:

Being that agent of change. Someone has got to come in carrying the torch, it's so cliché, but shedding the light on "This is what's possible out there"

To this end, the student teachers developed strategies to share this vision in ways that were informed by an understanding of school politics. In preparation for their meeting with Ms. Pat, in which they shared the proposed overview for their student-driven social action project, the student teachers made several purposeful moves to frame the work in politically savvy ways. First of all, although the group was initially considering focusing their project on bullying and other perceived "problems" at the school, their sense that the school administrator was very image conscious led them to reframe the project with a positive spin, focusing on positive school culture. Charlie shared the following description of this approach:

We were careful about how we framed the overall project in the beginning. We went from "We're going to stop the angry tone and bullying" to "We're going to create a positive school culture," kind of that spin on it. And it helped a lot.

The wisdom of this choice was further affirmed in future interactions with Mr. Plum described by Danni:

When we wanted to put anti-bullying posters up, he was like "No, because I don't want it to look like we have a bullying problem in this school." So then we wanted to put the award certificates up in the teacher's rooms for being a

recognized ally---"Well, you can't do that because the other teachers are going to start, you know, fighting over it or whatever." Anything we wanted to do, it was like---"How is this going to look for the school?"

In this way, for better or worse, an awareness of the school politics enabled the student teachers to frame their work in a way that was mindful of these politics.

Likewise, in their overview, the student teachers were careful to illustrate how this project was aligned with multiple interdisciplinary Common Core standards, a feature which was especially timely at LMS as they were in their first year of Common Core implementation. To this point, in his post-interview, Bobbi once again underscored the importance of having "something to show for it" (e.g., an example, student work, testimonials from students. etc.) when attempting to convince others:

I still think though that you have to have something to show for it. I can't just come in and say "This idea is great." That's enough to get somebody like me going because I can start to envision and imagine things but a lot of people are more pragmatic than that and they'll be like "Um, yeah that sounds great but, you know, that's not possible." Like the way I used to think in class---"That sounds awesome but I don't think it can happen"---until you realize it can. It just doesn't happen all at once.

These strategic moves to frame their ideas around shared goals reveal the ways in which the student teachers felt compelled to "prove" the worthiness of their work. While perhaps necessary, this can notably be problematic when your work is in part motivated by a commitment to the non-cognitive or socio-emotional facets of schooling.

The student teachers also chose to adopt the approach of, as Charlie put it, "kind of being direct with some things and then tip-toeing about others." The group, for example, decided early on that in meeting with Ms. Pat and Mr. Plum, they would not ask for permission regarding how to approach their project but rather share their ideas as well as the principles that undergirded them and ask for input. Ray offered the following illustration of this approach:

To try to get them on board after Mr. Plum did come into the classroom that one time and was not going along with the idea of the IPARDC process, we set up that meeting with him and we first specifically just went over the process and what it was supposed to mean to the students. Not permission, it was strictly this is what we are doing, this is the process, this is how it's happening, this is what we want the kids to take away. And then, these are their ideas. So that way it was focused much more on the process itself, trying to get that information out.

Along the same lines, Charlie once again spoke of the ways in which the delivery of ideas has deep implications for partnership, revealing the subtle difference between sharing ideas and telling others what to do:

It's not just telling them what you are doing or what you want to do but focusing on how you approach every conversation that you have with them. And not just administration but other teachers as well. Like I said you're not telling them how to run the school or telling teachers how to run their classroom but sharing ideas because you all have the same goal...or at least you have to hope that you have the same goal.

Lastly, as was described in Chapter 6, when particularly troubling incidents occurred (e.g., the surprise lecture by Mr. Plum during the I/E period idea sharing and Danni's run-in with Ms. Pat), the student teachers would contact me to debrief and talk through their next steps. Inquiry group meetings were also a popular venue for debriefing. In so doing, the student teachers learned that debriefing with others can be an especially useful strategy when dealing with tense situations. This was especially true for Danni, who reflected that "the younger me would have been mouthing off and stuff" but through this work, she realized the following:

Sometimes it's just better to regroup, talk it out, and think about what you need to do instead of trying to take care of it in the heat of the moment. So, you know, when that whole shenanigans happened with Mr. Plum being completely clueless of what the purpose of that sharing was---see sometimes I feel like it's important to say something at the time, to be like "Excuse me real quick, I just want you to know that---" and if it were me, I can't say that I wouldn't have done that. But I think sometimes it's better to just not react and it's better to let the storm roll over and reflect, think, and move forward from it and I definitely did that with Ms. Pat...And that's hard to do. It's hard to just step back and let it roll and let them stomp on you a little bit and then try to regroup afterwards. It's like resilience almost.

These realizations made by student teachers regarding the role of strategic communication in middle level education reform make clear the deeply political nature of this work. Once again, these politics suggest that if we aim to support our student

teachers in challenging the status quo, developing such strategies must be part of the curriculum of teacher education and student teaching.

Flexibility and Patience

A final theme in the student teacher insights concerned the flexibility and patience that is required to participate in middle level education reform. Danni spoke, for example, of the ways in which the collaboration this work necessitated also naturally required great flexibility:

You have to be extremely flexible and even more patient. We changed what we were doing SO many times. It was like "We're going to do this" and then the next meeting "Well, that didn't work out so we're going to go here now..." and I think just not getting frustrated and beaten down by that is really important. So you just have to be really really flexible. And you have to work with so many different people too, you just have to stay patient...just being patient and know that you're dealing with other people and it's on their time and again, unless you're the administrator and you're the person pushing and it's required for other people to do it, you're completely at their mercy and you have to just kind of wait.

Similarly, Bobbi offered the following summary of what it takes to participate in middle level education reform:

Patience, flexibility (flexibility I should have capitalized because I have learned you really have got to be flexible with this), communication, optimism (which is another thing that really kept me going), a sense of purpose, realism, and finally, just resolve. Going into it knowing it's going to be a challenge, it's going to be

hard, you're trying to put something in that a lot of people have never seen before and you have just got to be dedicated to it.

And finally, in regards to the patience required, Ray expressed frustration regarding her perception that middle level education reform happened in "baby steps," explaining that "it's a slower process than I thought."

These realizations further suggest that participation in ROCI was associated with a shift from idealistic to more realistic views of the arc of middle level education reform. Despite their frustration at times with the necessity of "baby steps," the group also found comfort in reminding each other that "change is small," which became a mantra of sorts in our meetings. The work the group completed is itself an indication that through collaboration, teachers can make small but significant changes. To this point, Bobbi ended her interview on the following note: "Small goals, small victories, and build up from there." Charlie, likewise, articulated this sentiment as follows:

You know it's interesting, my take-aways are kind of the same as the take-aways my students had, you know? My students came into the project thinking "You know, we're not going to change it. We can't really change anything, we have to deal with what you have." And I would tell them, you know, that small changes can make a big difference and I've had that same thing kind of happen with me.

Conclusion

In this chapter, I have discussed the insights student teachers developed into what it takes to participate in middle level education reform. First, the student teachers emphasized the importance of effective collaboration with three key stakeholders in education reform: 1) other teachers, 2) administration, and 3) students. Their reflections

reveal to what extent the middle level concept hinges on successful collaboration that is complicated by the power dynamics in schools. Second, the student teachers underscored the importance of strategic communication, reporting that the frequency, framing, and method of communication used with key stakeholders were especially important. And lastly, the student teachers emphasized the flexibility and patience that is required to participate in middle level education reform. In the next and final chapter, I discuss the conclusions and implications of this research for teacher education.

CHAPTER 8: CONCLUSIONS AND IMPLICATIONS

In this final chapter, I begin by summarizing the unique contribution of this study. I subsequently revisit the conceptual framework presented in Chapter 2 and reflect on the limitations of this study. Building on these findings, I then outline several implications for teacher education. First, I consider the implications of this work for teacher education curricula that prepares preservice teachers for reform-oriented student teaching. Second, I then describe how ROCI could be used as a framework to further support our partner schools and CoE graduates in reform-oriented teaching. Third, I consider how ROCI might be used to support teachers through induction. In closing, I discuss the implications of this work for future research.

Contribution of this Study

This research fills a gap in the middle level teacher education literature by proposing and investigating a pedagogy for supporting reform-oriented student teaching and innovation in the context of middle level education reform. This research has offered several findings connected to Reform-Oriented Collaborative Inquiry and reform-oriented student teaching, each of which is summarized briefly in the following sections.

Description of Reform-Oriented Collaborative Inquiry in Practice

Chapter 4 provides a thick description of the work of our collaborative inquiry group in all three phases of ROCI. Multiple examples are thus provided of how the group engaged in each of the following research activities: forming and norming, setting reform-oriented goals, innovating, adjusting responsively, maintaining reform-oriented focus, making meaning, and sharing their work with others.

Description of the Resulting Reform-Oriented Innovation

In conjunction with the description of the group's process, Chapter 4 also discussed the student-driven social action project that was developed by the group through participation in ROCI. Driven by the essential question "How can we promote a positive school culture at LMS?," this project used the Investigate, Plan, Act, Reflect, Demonstrate/Celebrate (IPARDC) framework (National Youth Leadership Council, 2013) to explore and take action regarding this student identified topic of interest. The resulting project was designed to experiment with the following AMLE characteristics: "active, purposeful learning" and "relevant curriculum," and the "school environment is inviting, safe, inclusive, and supportive of all." Using "hands-joined" learning, the student teachers co-developed a project that was driven by student input and provided multiple opportunities for student choice and voice. Although students developed many ideas, this project ultimately resulted in student participation in a school-wide Spirit Week, Teacher Appreciation Week, and the proposal of a student leadership club called S.O.U.L. (Society of United Leaders).

Middle School Student Feedback Regarding Their Perception of the Project

Given the characteristics emphasized in the project, the inquiry group was especially interested in receiving feedback from students regarding the extent to which they felt the project 1) gave them a voice, 2) was important or relevant to them, and 3) made a difference in the school. An analysis of student feedback from the small sample of students who provided consent indicated the following results:

• student voice: 18 yes, 3 no

• important or "relevant" work: 18 yes, 2 no, 1 blank

• making a difference: 19 yes, 1 no, 1 blank.

Students also reported learning many valuable lessons in hard work and determination, teamwork and leadership skills, and empowerment.

Description of Challenges and Benefits Experienced by the Student Teachers and Teacher Educator Engaged in ROCI

As the group engaged in ROCI, we experienced several challenges and benefits. As students attempted to innovate, they experienced challenges associated with a disconnect between College of Education (CoE) and Lakeside Middle School (LMS) visions of teaching and being "just an intern." Additionally, the student teachers struggled at times with cultivating student engagement in "new" teaching approaches and had to navigate multiple challenges associated with time and collaboration.

There were also several benefits associated with participation in Reform-Oriented Collaborative Inquiry. ROCI supported the group in reform-oriented innovation and led to increased understanding and confidence in reform-oriented teaching practices. The student teachers also reported shifts in their relationships with students. In participating in ROCI with the student teachers, I also developed several new insights as the teacher educator concerning how to navigate working in the theory/practice space with student teachers.

Student Teacher Insights Regarding What It Takes to Participate in Middle Level Education Reform as a Teacher

Drawing from their experiences throughout ROCI, the student teachers provided several insights into what it takes to participate in middle level education reform. First, the student teachers emphasized the importance of effective collaboration with three key

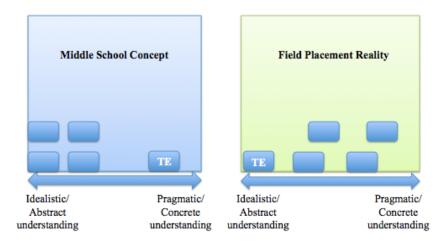
stakeholders in education reform: 1) other teachers, 2) administration, and 3) students. Second, the student teachers underscored the importance of strategic communication, especially as it concerns the frequency, framing, and method of communication used with key stakeholders. And lastly, the student teachers emphasized the extent to which flexibility and patience are required to participate in middle level education reform.

Revisiting the Conceptual Framework

As discussed in Chapter 2, ROCI was developed to address some of the perennial challenges in teacher education, including the salience of the traditional (Zeichner & Tabachnick, 1981), the "application-of-theory-model" of teacher education (Korthagen, 2011, p. 34), and the apprenticeship model of teacher education (Cochran-Smith, 1991b). Informed by these challenges, I presented a conceptual framework that illustrated my assumptions about the trajectory of student teachers in specialized middle level teacher preparation programs in the context of middle level education reform, and how I envisioned collaborative inquiry in middle level teacher education might disrupt this trajectory. In short, this conceptual framework proposed that participation in ROCI would challenge the teacher educator and student teachers to innovate in the intersection of theory and practice, thus ensuring that reform-oriented visions of teaching are not eclipsed by the immediacy of field placement realities. In so doing, the overlap between the middle school concept and field placement reality would be incrementally enlarged since the group would have contributed to bringing new reform-oriented ideas to the school/classroom

The findings of this study are consistent with this proposed trajectory (Figures 2.2, 2.3 and 2.4) in the following two ways: 1) engaging in ROCI did enable the teacher

educator and student teachers to work in the theory/practice space, and 2) the group did successfully innovate to bring new reform-oriented ideas to the school and classroom through their student-driven social action project. But the findings also indicate that this representation obscures some of the nuances in the shifting perspectives of both the student teachers and teacher educator involved. For this reason, I developed additional conceptual representations informed by some of the specific benefits and challenges associated with ROCI. (See Figures 8.1, 8.2, and 8.3.)



Prior to student teaching

Figure 8.1 Student teacher and teacher educator perspectives prior to student teaching.

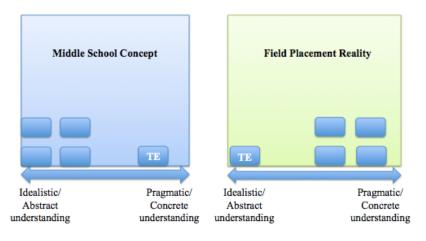
In this new representation (Figure 8.1 and 8.2), student teacher and teacher educator perspectives are positioned in two boxes ("Middle School Concept" and "Field Placement Reality") on a continuum from an idealistic/abstract understanding to a pragmatic/concrete understanding. The two extremes of the continuum in these new representations should not be mistaken to represent a theory and practice dichotomy. Rather, in the "Middle School Concept" box to the left, the continuum represents a shift from an abstract understanding of the middle school concept (e.g., I understand active,

purposeful learning in theory but can't envision what it could look like in a specific classroom in a specific content area) to a concrete understanding (e.g., I understand the teacher moves required to facilitate active, purposeful learning in a seventh grade Mathematics classroom in this school). Both ends of the continuum are thus informed by theory. In the "Field Placement Reality" box to the right, the continuum represents a shift from an abstract understanding of the field placement reality (e.g., I understand the ways in which curriculum informs and restricts the work of teachers) to a concrete understanding of the implications of this for a given classroom (e.g., I understand the ways in which the new Common Core curriculum restricts and does not restrict what a teacher can do in a seventh grade Mathematics classroom in this school).

The small blue rectangles represent the participants in ROCI and the teacher educator is labeled with the code TE. In Figure 8.1, which depicts student teacher and teacher educator perspectives prior to student teaching, all four student teachers are depicted as having relatively idealistic/abstract understandings of the middle school concept. Although they were committed to the middle school concept, findings from this study suggest that they entered student teaching with an idealistic/abstract understanding of what the middle school concept could and should look like in practice. As a teacher educator who has previously taught in and visited middle schools in which many of the characteristics of the middle school concept were being implemented, however, I am depicted as having a more developed pragmatic/concrete understanding of the middle school concept. As it concerns the field placement reality, however, I began this experience with only second-hand knowledge of Lakeview Middle School and, thus, understood it only in the abstract sense. Having completed an early field placement at

LMS, the student teachers began student teaching with a basic pragmatic/concrete understanding of LMS.

The next figure, Figure 8.2, depicts predicted student teacher and teacher educator perspectives after student teaching without ROCI. In this figure, there is no predicted change in the understanding of all parties regarding the middle school concept since the student teaching experience will not be designed to purposefully engage the student teachers and teacher educator in further exploring the middle school concept. In contrast, however, the student teachers are likely to further develop their pragmatic/concrete understanding of their field placement schools. The teacher educator will experience no change in either box.



After student teaching without ROCI

Figure 8.2 Student teacher and teacher educator perspectives after student teaching without ROCI.

In contrast, the findings of this study indicate that after student teaching with ROCI (as is depicted in Figure 8.3), both student teachers and the teacher educator experience a shift towards more pragmatic/concrete understandings. Through participation in ROCI, the student teachers in this study reported increased understanding

and confidence in reform-oriented teaching tied to the middle school concept. For this reason, they are pictured closer to the pragmatic/concrete end of the continuum. Likewise, since I also gained a deeper understanding of the kinds of specific teacher moves required to facilitate a student-centered learning environment, the TE rectangle is slightly shifted to the right. In regards to the field placement reality, I am also represented as further to the right since, through ROCI, I developed a more concrete understanding of teaching and learning at LMS. The student teachers are likewise shifted slightly to the right since in reflecting on the implementation (or lack thereof) of AMLE characteristics at the school and attempting to innovate, they learned about aspects of the school with which they were previously unfamiliar.

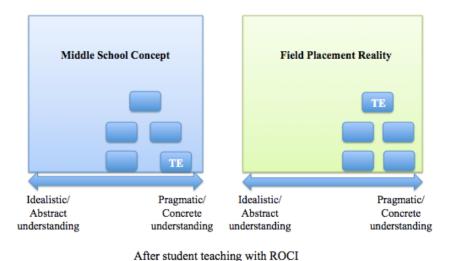


Figure 8.3 Student teacher and teacher educator perspectives after student teaching with ROCI.

As a complement to the conceptual framework presented in Chapter 2, this conceptual representation thus illustrates how situating the work of teacher educators and student teachers in the intersection of theory and practice shifts the perspectives of both parties to a more pragmatic/concrete understanding of reform-oriented teaching.

Limitations of this Study

In addition to the contributions of this study, there are also several limitations. As I explored the experiences of this small group of student teachers, I was less interested in universality as I was in particularity since I sought to understand the experience of ROCI for these student teachers in this program in this middle school. Nonetheless, through careful analysis of the qualitative results of this study, it is possible to generalize some of the experiences of our group to other similar situations, revealing layers of universality and particularity. Erickson (1986) describes this analytic work as follows:

The task of the analyst is to uncover the different layers of universality and particularity that are confronted in the specific case at hand—what is broadly universal, what generalizes to other similar situations, what is unique to the given instance. This can only be done, interpretive researchers maintain, by attending to the details of the concrete case at hand. (p. 130)

The particular problem that motivated this research (i.e., teacher education in the midst of middle level education reform) is likely to resonate with many other specialized middle level teacher education programs. The challenges, benefits and student teacher insights associated with ROCI could hence inform the efforts of these programs to address this problem. When reading the challenges, however, individual teacher education programs may find that some of the particulars (e.g., administrative support of the AMLE vision, school level implementation of individual characteristics) differ from their circumstances, Consequentially, by attending to the similarities between this research and their situation, middle level teacher educators can determine which findings are relevant to their work and which are not applicable.

The small sample of student teachers included in this study is the foremost limitations to generalizability. Additionally, since participant selection was purposefully designed to investigate ROCI with reform-oriented students, this limited the variation in student teacher attitudes represented in the study. The participant selection for this study, though purposeful, thus resulted in a sample that is not likely to be representative of an entire cohort of student teachers. While the challenges and benefits described may be generalizable to those of other reform-oriented student teachers in similar circumstances, student teachers who are less reform-oriented are likely to experience different challenges and benefits associated with ROCI. The insights they develop through these experiences are also likely to be different. Additionally, since all participants were enrolled in a dual certification Mathematics and Science program, the manner in which they approached this work was likely informed by their disciplinary approaches to teaching and learning. Teachers from other disciplines, for example, would have likely developed a different approach to the same AMLE characteristics. Further research into the disciplinary nature of AMLE characteristics as well as the ways that student teachers from different disciplines engage in ROCI is thus recommended.

A similar limitation concerns the decision to pair prospective participants with cooperating teachers who were open to innovation. Although the student teachers reported challenges associated with variations in mentor teacher expectations, this variation is likely to be considerably larger when considering the placement of an entire cohort of student teachers. Consequentially, student teachers placed with mentor teachers who are less open to innovation may experience different challenges and benefits. Likewise, the insights they develop may also be different.

Although a diverse and representative sample was not essential, nor desirable, for this initial study, a logical next step in this line of inquiry might involve research into the utility of ROCI for groups of students who demonstrate a range of commitment to middle level education reform. Such an investigation would indicate whether engagement in ROCI might strengthen the reform-minded commitments of less enthusiastic participants. Similarly, a cross-case analysis could be designed to investigate the challenges and benefits experienced by student teachers working with mentor teacher who represent a range of stances towards innovation. Such research would further illuminate the complexity of reform-oriented student teaching and subsequently inform new methods to support this goal.

Additionally, in an effort to keep my data manageable and because my research questions were largely focused on ROCI as a pedagogy for student teacher learning, my classroom observations were limited to two formal observations per student teacher. For this reason, the findings were informed by only a small slice of first-hand observation in the classroom. As it concerns the benefit of "increased understanding and confidence in reform-oriented teaching" in particular, the reliance on student teacher self-reports of teaching practices may not fully or accurately capture their actual teaching. A subsequent study that makes greater use of classroom observations, perhaps including data collected by university supervisors, could be used to provide a more detailed illustration of reform-oriented student teaching in practice.

As it concerns the benefits and challenges experienced by the student teachers, the absence of a comparison group leaves us guessing to what extent these changes are associated with ROCI as opposed to the student teaching experience as a whole.

Comparing the responses of ROCI participants to the responses of non-ROCI student teachers may have provided greater insight into this distinction. Since all student teachers, mentor teachers, and classrooms are unique and complex, however, this precludes the creation of a true comparison group. Consequentially, although this research would still be interesting, the associated findings would also be limited.

In regards to the middle school student feedback, the limited number of middle school students who returned signed consent forms and completed final reflections (n=21) is also a limitation for Study 1 as it calls into question the representativeness of their project feedback to the entire student population involved. Additionally, since the students wrote their names on their reflections, although these were ungraded, they may have felt compelled to offer positive feedback, resulting in biased data.

As was addressed at the start of Chapter 5, the absence of the perspectives of other stakeholders involved in this work (school administration and mentor teachers especially) has undoubtedly resulted in an incomplete version of events. Including these other stakeholder perspectives would have arguably strengthened this research by adding a dialogic dimension to the findings. Likewise, as key partners in teacher education and powerful stakeholders in middle level education reform, the inclusion of mentor teachers as co-inquirers in ROCI would have been beneficial to all parties. Giving the increasing demands on in-service teachers, however, ROCI involving only student teachers and a teacher educator may sadly be the most workable approach. That being said, my hope would be that a future iteration of this inquiry could involve student teachers and inservice teachers in ROCI in a way that is thoughtfully streamlined with existing professional development.

Implications for Teacher Education and Professional Development

I began this work with the following overarching questions in mind:

- 1) How can middle level teacher education contribute to middle level education reform?
- 2) How can we support middle level student teachers in innovating in a responsive and reform-minded way during student teaching?

Guided by these questions, the findings from this research point to several implications for teacher education and professional development in these areas. In this section I begin by discussing implications of these findings for teacher education curricula. I then describe how variations of ROCI could be used to further support our partner schools and CoE graduates in reform-oriented teaching.

Teacher Education Curricula That Prepares Student Teachers for Reform-Oriented Student Teaching

Chapter 5 illustrated the tension that the student teachers experienced as they attempted to innovate while navigating their status as relative novices and outsiders. In addition to innovating in ways that challenged the status quo of the school, these student teachers were also challenging the status quo of student teaching. The challenges they faced in attempting to do so raise important questions as it concerns the potential for teacher education to contribute to education reform----What does it mean to be a "student teacher"? If we aim to support reform-oriented student teachers in embracing, enacting, and advocating for the comprehensive AMLE vision of the middle school concept, the role of the student teacher should be clearly defined (in the teacher education program and at the partnership school) as an active and contributing participant in all aspects of

the school community. In this view of student teaching, student teachers should not be restricted to a thin slice of the work of teaching nor shielded from the complexity and politics of school reform efforts, but should rather be actively engaged in the big picture. An emphasis must thus be placed on opportunities to engage in not only reform-oriented teaching, but school reform efforts writ large. As it concerns the AMLE middle school concept, for example, the work of student teaching should not be limited to the Curriculum, Instruction, and Assessment category. Instead, student teachers should be aware of and involved in work that pertains to aspects of schooling that push beyond their classroom walls yet deeply impact teaching and learning (e.g., school environment, family involvement, school organization, etc.).

As was evidenced in Chapters 5 and 6, however, reform-oriented student teaching in this manner requires a specific set of skills that are not traditionally emphasized in teacher education. Student teacher insights into what it takes to participate in middle level education reform point to a specific set of skills required to navigate reform-oriented student teaching. As a reminder, these student teacher insights included: 1) collaboration with multiple stakeholders, 2) strategic communication, and 3) flexibility and patience. Teacher education curriculum that supports student teachers in developing these skills is thus highly recommended. The considerable learning curve the student teachers experienced in attempting to enact reform-oriented practices also suggests a need for greater emphasis on practice-based teacher education. In this section, I subsequently propose specific suggestions for accomplishing these goals.

First, findings from this study stress the central role that collaboration plays in not only the work of teaching in the middle grades but also in the work of participating in

education reform in schools. Although the group of student teachers involved in this study were friends and close colleagues, they struggled at times to collaborate within their group and with other stakeholders. This finding suggests that effective collaboration is a complex task that needs to be explicitly taught and refined over time. An emphasis should be placed in teacher education programs, therefore, on framing the work of teaching and school change as a collaborative venture, thus explicitly supporting student teachers in learning how to collaborate with others. Cycles of performance-based assessments that support and evaluate student teachers in collaborating with a team, for example, would be especially useful and authentic. Likewise, student teachers could also benefit from opportunities to view examples of productive collaboration in action, reflect on their own collaborative strengths and weaknesses, and experiment with addressing challenges associated with collaboration productively.

Secondly, the need for strategic communication, flexibility and patience, while all related to collaboration, also suggest that teacher education curricula must explicitly prepare student teachers for the work of navigating school politics and bureaucracies. To this end, student teachers could benefit from opportunities to explore the perspectives of multiple stakeholders in school-level education reform (e.g., school leadership, parents, in-service teachers, students, etc.), consider the politics associated with proposing specific reform-oriented changes, and develop strategies for communicating effectively with multiple stakeholders. Likewise, teacher educators should push back against the tendency for student teachers to adopt extremist perspectives regarding education reform (e.g., "all or nothing," "none of this is possible," or overly idealistic stances). Instead,

student teachers should be routinely challenged to consider possible compromises and small changes that could still lead to meaningful change.

Lastly, this study serves as a reminder of the challenges of enactment. Since the student teachers were attempting to enact reform-oriented practices that they had never seen in actual middle school classrooms with actual students, they struggled at times with some of the key teaching moves required. Although these practices were modeled, discussed and simulated at length in my teacher education course and others within the program, this simply was not adequate in preparing them for reform-oriented teaching in their field placement school with middle school students. This finding affirms the potential of innovative approaches to teacher education that mutually support practicebased teacher education as well as teaching and learning in partnership schools (Grossman, Hammerness, & McDonald, 2009; Grossman & McDonald, 2008; Loewenberg, Ball & Forzani, 2009; McDonald, Kazemi, & Kavanagh, 2013). Design settings in which preservice teachers observe and experiment with "core practices" or "high-leverage practices" (Grossman et al., 2009; Grossman & McDonald, 2008; Lampert et al., 2013; Ball & Forzani, 2009) with mentor teachers in actual classrooms, for example, could be especially powerful in deepening student understanding of reformoriented practices.

To illustrate how practice-based teacher education might have helped these student teachers in this study, I offer the following example. In this study, the student teachers struggled especially with key teaching moves required to facilitate a student-centered learning environment. While they eventually experimented and developed increased confidence and understanding of these practices, their initial attempts revealed

that they held naïve conceptions regarding the kinds of supports students may benefit from in a learner-centered environment. In this instance, student teachers could have benefited from opportunities in prior teacher education courses to view and "decompose" representations of student-centered instruction via video or actual classroom observation (Grossman et al., 2009). Subsequent opportunities to experiment with and reflect on cycles of small-scale instructional activities or "approximations" of practice (e.g., facilitating a student-centered small group discussion, conferencing with students to make strategic choices regarding a project, or scaffolding student-centered exploration of a new topic) in a field placement classroom would have then provided them with some initial experience on which to build. A dynamic design setting in which mentor teachers and student teachers work with a teacher educator to identify and refine such instructional activities would create precisely these types of opportunities.

Design settings such as those described above further serve the goals of preparing reform-oriented student teachers and building capacity in reform-oriented teaching in partnership schools. Additionally, in building capacity in this way, preservice teachers would also now be able to observe examples of reform-oriented teaching in partnership schools, thus decreasing one of the fundamental challenges that motivated this work in the first place. Given the likelihood that these field placements will not reflect the AMLE vision of teaching and learning initially or entirely, early field placements should also be designed to cultivate critical reflection rather than simple observation. As part of a commitment to counteract the salience of the traditional, preservice teachers should critically reflect on the teaching and learning practices in field placement schools, consider possible explanations for certain choices, and envision alternatives that are

rooted in AMLE characteristics and responsive to the particular nature of their assigned field placement school.

ROCI as a Framework for Building Capacity in Reform-Oriented Teaching

The most encouraging finding from this research is that despite the numerous challenges the student teachers faced, ROCI was indeed supportive of reform-oriented innovation. Despite numerous challenges, through ROCI, the student teachers were ultimately able to develop and implement a reform-oriented innovation. This suggests, therefore, that ROCI is a framework that supports participants in persisting in reform-oriented innovation despite numerous challenges. Building from this encouraging finding, I envision three ways in which ROCI could be used as a framework to further support our partner schools and CoE graduates in reform-oriented teaching. I begin by discussing what this work has revealed about the urgent need for the political, structural, and financial support of school-university partnership work. I then describe each of the following possibilities in order: 1) how ROCI could be used as collaborative professional development aimed at building capacity in reform-oriented teaching, 2) how ROCI could provide mentor and student teachers with structured reform-oriented support, and 3) how ROCI could be used to support teachers through induction.

The need for political, structural, and financial support of school-university partnerships. As the student teachers endeavored to create and implement a responsive and reform-oriented innovation, they faced several significant challenges that illustrate how difficult it can be to engage in reform-oriented student teaching, even when the professional literature and your teacher education program advocates for this reform-oriented vision. The first of these challenges was an apparent disconnect between College

of Education (CoE) and Lakeside Middle School (LMS) visions of teaching, which was experienced by the student teachers in a limited school implementation and understanding of AMLE characteristics and perceived resistance to "new" ideas. These challenges were compounded by a second category of challenges associated with being "just an intern," which included variation in mentor teacher expectations and mixed messages from stakeholders regarding what it means to be "just an intern." And lastly, in part due to the limited implementation of AMLE characteristics at LMS, the student teachers struggled to cultivate student engagement in "new" teaching approaches, such as active, purposeful learning, which strayed from the dominant passive mode of learning. Since these challenges made collaboration and innovation difficult at times, they serve as a potential deterrent for reform-oriented teaching. This is problematic for those who strive to support student teachers in enacting reform-oriented practices through induction and throughout their careers.

These challenges suggest that if Colleges of Education aim to support student teachers in reform-oriented teaching, school-university partnerships must be framed to focus on building capacity around a shared vision of reform-oriented teaching. This is not an idea that is new to teacher education. To the contrary, as was discussed in Chapter 2, a great body of literature supports the importance of dynamic school-university partnerships in the work of teacher education and education reform (Boyle-Baise & McIntyre, 2008; Clark, 1999; Darling-Hammond, 2000; Zeichner, 2006, 2010). Yet, as has been illustrated by Zeichner (2006; 2010), school-university partnership work is hindered by many pragmatic challenges related to resources such as funding, time, and personnel. In a time when public institutions are struggling with diminishing resources

(Lyall & Sell, 2006), teacher education programs that aspire to develop dynamic school-university partnerships are plagued with questions such as *Who will do this work?* and *How will they be compensated?* Additionally, a lack of incentive for faculty in research-oriented universities to engage in school-university partnership work significantly compounds this problem. For this reason, while middle level teacher education programs are touted as a potential <u>lever</u> for middle level education reform, their capacity to build the dynamic school-university partnerships required for such work is greatly limited.

Acknowledging these challenges, Zeichner (2010) has argued that "senior tenured faculty and administrators must assume leadership in creating the conditions where faculty will be rewarded for their engagement and for creating and sustaining exemplary teacher education programs" (p. 492). As it concerns funding, Zeichner also contends that:

Resources being devoted to meeting elaborate accountability mechanisms...a more significant impact on enhancing program quality and student teacher learning can be achieved by developing more streamlined and relevant accountability systems and reallocating much of the money now being spent on bureaucratic and hyper-rationalized monitoring of programs to support school-university and community connections. (p. 493)

Lastly, he has recommended that this work could be supported through the creation of a cross-institutional network "focused on the creation of these kinds of boundary spanning and hybrid practices" (p. 492). Consequently, although the findings of this study have clearly affirmed the need for dynamic school-university partnerships, these recommendations underscore the structural, financial, and political changes such work

requires. Even the most reform-oriented student teachers included in this study faced great challenges associated with navigating the disconnect between CoE and field placement visions of teaching and learning. For this reason, if middle level teacher education is indeed intended to serve as a lever for middle level education reform, this research further stresses the urgent need for these systemic changes. Although an educational grant, for example, could be written to support the start-up of this sort of work in its initial phases, systemic shifts would still be necessary if this work is to be scalable and sustainable.

ROCI as collaborative professional development with partnership schools.

ROCI has been proposed herein as a pedagogy to support the work of hybrid teacher educators. As was mentioned in Chapter 2, although Zeichner (2010) has advocated for more "hybrid teacher educators," how precisely their work could be used to support mutually beneficial school-university partnerships remains unclear. The finding that ROCI was supportive of reform-oriented student teaching is an encouraging indication that it might serve as a useful framework for collaborative professional development aimed at building capacity in reform-oriented teaching. What follows is a vision of how ROCI could be used to focus the collaboration between College of Education faculty and partnership school leadership in mutually beneficial ways.

The findings from this study have underscored the central role that school administration has in determining to what extent the middle school concept is implemented in a given school. The findings also indicate that the work of these student teachers would have been facilitated by greater alignment between CoE and LMS visions of teaching. The absence of this shared understanding had serious repercussions for our

group's work. Although an initial pre-ROCI meeting would have been an improvement, a shift towards more meaningful collaboration between CoE faculty and school leadership, in general, would further support reform-oriented student teachers. While full alignment may be out of reach, school-university partnerships could be strengthened by engaging a CoE "hybrid teacher educator" and partnership school leadership in working towards the following goals:

- Developing a shared understanding of the characteristics associated with the middle school concept
- 2. Developing a shared understanding of the ways in which the middle school concept is and is not being implemented in the partnership school
- 3. Developing a shared understanding of the apparent hurdles in implementing certain characteristics in the partnership school
- Identifying and developing ways to work towards shared goals in relation to the middle school concept.

Since these four goals are in keeping with those of Reform-Oriented Collaborative Inquiry, a similar version of collaborative inquiry could be adopted to support the collaboration of a CoE "hybrid teacher educator" and partnership school leadership.

Additionally, the fourth goal could be accomplished by engaging teachers in departments, teams, or professional learning communities in ROCI. In this way, ROCI could be used as a means for school-wide professional development that is driven by shared goals but also informed by the interests and needs of teachers.

The role of the hybrid teacher educator in this vision would be similar to the role I assumed in this study, serving as a co-inquirer as well an advisor who can offer support

and seek out relevant resources. Additionally, the hybrid teacher educator would serve as liaison between the CoE and partnership school, sharing valuable insight into the partnership school and seeking ways to engage other faculty in the ongoing work of the partnership school. In light of critiques of the historically hierarchical model that gives priority to academic over practitioner knowledge (Martin, Snow, & Franklin Torrez, 2011; Zeichner, 2009, 2010), the pursuit of the four goals listed above should not be viewed as an opportunity for CoE faculty to enlighten the partnership school leadership. Instead, this joint inquiry should be framed as an opportunity for both parties to deepen their understanding of the intersection of theory and practice in middle level education reform. When approached with this spirit of collaboration, there are decided benefits for both CoE faculty and partnership school leadership. CoE faculty members, for example, could use this deepened understanding to inform the development of teacher education curricula that purposefully prepare preservice teachers for student teaching in a given partnership school. Likewise, in working with school leadership towards reform-oriented goals, CoE faculty could gain valuable ground in addressing the disconnect between teaching visions which, this research has shown, continues to be problematic. Similarly, school leadership at partnership schools could benefit from the support of others committed to the specific work of teaching and learning in the middle grades. By extension, there would also be clear benefits for student teachers, in-service teachers, and the middle school students who will benefit from teaching and learning in a school environment that is informed by research on developmentally-appropriate environments for middle grades students.

Additionally, meaningful collaboration of this sort also opens up an opportunity to bolster the organizational health not only of the partnership but also of the partnership school. As the student teachers in this study attempted to make sense of the challenges they were experiencing, they occasionally spoke to the ways in which fear seemed to be driving decision-making in ways that impacted the organizational health of the school. They frequently commented, for example, that Mr. Plum feared judgment, avoiding anything that could potentially make the school "look bad." Similarly, they suggested that Ms. Pat's mixed messages seemed motivated by a fear that if their changes to the status quo were not successful, there would be consequences for her. From the student teachers' perspective, this fear resulted in a school-wide aversion to innovation, which made the student teachers especially weary. In the same way that ROCI was en-"courage"ing for our group, engaging in collaboration with the school leadership and thus supporting them in engaging their staff in collaboration, could serve to shift the focus away from fear and into innovation.

ROCI as reform-oriented support for mentor and student teachers. As was mentioned in the previous section, ROCI between CoE faculty and school leadership as well as among in-service teachers could present a powerful tool for capacity building and professional development in partnership schools. In this section, I present a vision for how ROCI could be used to support the collaboration of student and mentor teachers in reform-oriented teaching.

The challenges associated with this research highlight the potential value of mentor teacher participation in ROCI. Beyond the obvious role that mentor teachers play as models of teaching for student teachers, in their interactions with student teachers,

mentors also send implicit messages about what is important and even acceptable within a given school community. For this reason, in this research, the expectation that mentor teachers be at the very least "open" to allowing the student teachers to experiment with reform-oriented teaching practices was especially important. The very need for this stipulation speaks volumes about the variation in mentor teacher attitudes, which can in turn serve to either encourage or deter student teachers from innovation. Even with this expectation of openness, the student teachers experienced significant differences in mentor teacher support and involvement (i.e., Bobbi's primary mentor teacher was absent and Charlie's primary mentor teacher was described as having a "negative attitude towards the project"). Although participation in ROCI supported these student teachers in persisting despite these differences, this was often uncomfortable and certainly less than ideal for the student teachers.

Another rationale for mentor teacher participation in ROCI is the potential for this process to impact the practice of open-minded mentor teachers. Throughout ROCI, the student teachers did share several examples of two of the mentor teachers expressing a genuine interest in the AMLE vision (to which they were previously unfamiliar) and the reform-oriented work of the student teachers:

I could tell with my mentor teacher, certain things that she was picking up on and trying to do more of because of the things we were doing. So I could see a little bit of a change in her, which is a benefit to me and also I guess goes with the reform. I know that any time she would see us do something she really liked, she would write it down. But she started, I wanted to have more discussions with the students and let them lead the discussion instead of me. And I did notice that she

started letting them have more discussions and guide where the class went. She seemed more willing to try it. (Ray)

Some of them were really receptive to what we were doing. My math mentor teacher, for example, after I did my social justice project with them in there, he really took to it and he started to come up with another one for after I was gone. (Bobbi)

One of my mentor teachers has shown a lot of interest in doing more of the projects and activities that I started doing with the students. She has started doing them herself. (Charlie)

Although these findings were not relevant or robust enough to include as a theme in the results of this study, they do provide some encouraging evidence to suggest that mentor teachers can learn from the reform-oriented work of student teachers. Since this was only by observation and discussion, what might be possible if they engaged in the inquiry with their student teachers?

As is also the case with student teachers, variation in mentor teacher attitudes towards reform-oriented teaching is expected and unavoidable. With this in mind, although it would certainly serve to further the aim of aligning CoE and partnership school visions of teaching, ROCI cannot be expected to meaningfully impact the practice of all mentor teachers. At a minimum, however, the expectation that mentor teachers and student teachers collaborate through ROCI to develop a reform-oriented focus for their classroom would at least create a space for innovation. Additionally, since ROCI is a joint inquiry, student teacher and mentor teacher dyads may serve to break down pre-existing expectations regarding expert and novice roles.

Building on these findings, the vision of ROCI described herein would involve mentor teacher/student teacher dyads in a cohort supported by the hybrid teacher educator. Although the logistics surrounding the support of an entire cohort could take many shapes and, as indicated by the findings, should be responsive to the needs and preferences of the people involved, the following is one possibility of how this work could unfold:

Phase 1. Early in the student teaching year, the teacher educator would meet with the cohort of student teachers and mentor teachers to engage with them in Phase 1 activities of ROCI (i.e., Form and norm, Set reform-oriented goals). Using a combination of collaborative work spaces (e.g., Google documents, Canvas, etc.), a whole-group meeting, and a small group follow-up during a planning period, could involve as few as two meetings. During this phase, establishing collaboration and communication expectations for Phase 2 would be especially important and should be informed once again by the needs and preferences of the group participants. As they develop their reform-oriented focus, dyads could choose to work as a pair only or partner up with other dyads to form an interest group. By the end of Phase 1, however, all dyads should have identified and set a reform-oriented goal.

Phase 2. During this phase, the mentor teacher and student teacher dyads (once again, possibly in interest groups) would develop and implement their reform-oriented innovation, engaging in the following research activities: innovating, adjusting responsively, maintaining reform-oriented focus, and making meaning. During this phase, the teacher educator would meet with dyads through a combination of brief planning period meetings and after-school meetings to critically reflect, offer support, share

resources, brainstorm, and assist them in determining next steps as needed. As the work progresses, the teacher educator would revisit communication and collaboration norms, making adjustments.

Phase 3. During the final phase of ROCI, the mentor teacher and student teacher dyads would critically reflect and share their work with others. This could be accomplished in a variety of ways, including for example, a final roundtable session that takes place during a faculty meeting or a mini-conference hosted at the partnership school.

As was the case in this study, the teacher educator in this work would serve as an advisor and advocate for student teachers/mentor teacher dyads. Since the dyads would be innovating in a way that is responsive to their school community, the perspective of the mentor teacher would be of tremendous value and should be treated as such in all meetings. As described in an earlier section, the teacher educator would need to have a previously established relationship with the school administrator(s). The teacher educator would thus be in a position to communicate with school administration and advocate for teacher needs as they attempt to innovate. In the interest of collaboration and establishing trust, however, the teacher educator should not be viewed as an evaluator of the work of mentor or student teachers. For this reason, while the "hybrid teacher educator" may work with university supervisors, for example, she should not serve in a dual role as a university supervisor.

As it concerns the challenge of time, work associated with ROCI also seems to naturally fit with goals and tasks associated with pre-existing seminars that run concurrently with student teaching. For student teachers, therefore, participation in ROCI and the completion of the work involved could be viewed as part of the workload of this

seminar, thus providing time for student teachers to share, debrief, and offer each other support during seminar sessions. As it concerns the additional work being asked of the mentor teachers involved in this proposed vision, their participation in ROCI should be streamlined (or in substitution of) pre-existing professional development and continuing education requirements. Supporting participating mentor teachers in sharing their work at annual local or national middle level conferences could also serve as additional recognition.

ROCI as induction support for new CoE graduates. The findings of this research also suggest that collaborative inquiry could be used to support student teachers in reform-oriented teaching through induction and into their first years of teaching. Great emphasis has been placed in recent years on the need for induction support (Shockley, Watlington, & Felsher, 2013). High teacher turnover at secondary schools and in the middle level in particular has underscored the urgency of this support (Allen, 2005; Marinell & Coca, 2013; Smith & Ingersoll, 2004), resulting in legislative provisions or some form of induction support in a vast majority of states (Kaufmann, 2007). Although there appears to be consensus regarding its importance, however, critical induction work is hindered by a set of complex challenges associated with implementation, including a reluctance on behalf of districts to invest in such programs and the conflation of mentoring with structured induction support (Shockley et al., 2013). As it concerns the first of these challenges, research has revealed that expenses associated with teacher turnover come at a much greater cost than induction programs (Watlington, Shockley, Guglielmino, & Felsher, 2010). The potential <u>long-term</u> financial benefits to districts thus provide a valuable incentive for the careful design of such programs.

The conflation of mentoring with structured induction support reveals a lack of understanding concerning the essential elements of effective induction programs. Indeed, a meta-analysis of induction research has demonstrated that the components of induction programs vary widely and often miss the mark in addressing important variables such as teacher motivation and job satisfaction (Shockley et al., 2013). With this in mind, the authors of this meta-analysis offer the following definition for comprehensive teacher induction: "planned, needs-based, comprehensive, professional development programs for the retention and improvement of novice teachers that address teacher effectiveness, growth, and job satisfaction" (p. 371). They also contend that in addition to the prevailing emphasis on hygiene factors (i.e., basic needs), "induction programs must also attend to motivation factors that align with Maslow's higher order of needs that include self-worth, purpose, and belonging" (p. 370). In that it is both collaborative and driven by the interests of participating teachers, ROCI presents a promising way to address these needs.

For the small percentage of program graduates who are eventually hired into partnership schools, their participation in the ongoing ROCI professional development described above would serve the double purpose of induction support. But what of those middle level teacher education graduates who move on to work at other schools and districts all over the country? Having participated in ROCI in their middle level teacher education program, induction support could be provided by engaging recent graduates in a second iteration of ROCI as a collaborative venture across their multiple schools. Given the challenges associated with the first year of teaching, this iteration of ROCI would be somewhat scaled down and simply focused on supporting the first year teachers in continued experimentation in a reform-oriented area of interest. The use of collaborative

spaces already available to Colleges of Education (e.g., Canvas, Blackboard, Google documents, Google hangouts) could be used to facilitate the collaboration of small groups of first year teachers with similar interests. In this vision, the hybrid teacher educator role could be scaled down to simply helping to launch the group, meeting periodically via web conferencing, and helping to support the groups in preparing to share their work. The culmination of this work could subsequently involve presenting at an annual middle level conference hosted by the teacher education program. This annual conference could also feature the reform-oriented collaborative work described in each of the previous sections. If marketed to and well attended by surrounding area middle level teachers, this conference could thus serve to generate additional revenue to support the ongoing reform-oriented collaborative work described herein.

Implications for Future Research

This study and its associated findings lead naturally into multiple possibilities for future research, many of which have already been described in the limitations section of this chapter. Building from the ideas presented in the previous section of this chapter, however, a robust research agenda could also be developed that further investigates Reform-Oriented Collaborative Inquiry as a means to strengthen the effects of specialized middle level teacher education on the practices of student teachers, in-service teachers, and school administrators. First, the development of teacher education curricula that prepares student teachers for reform-oriented student teaching would provide an opportunity to investigate the impact of this new curriculum on the perspectives and work of student teachers. Second, the use of ROCI as a framework for collaborative professional development also opens the door for numerous research opportunities. An

investigation into the multiple challenges and benefits associated with the varying perspectives (e.g., school leadership, in-service teachers, hybrid teacher educators) engaged in this school-university partnership work could be especially illuminating. Third, the same dialogic approach could be used to explore the perspectives of student and mentor teachers participating in ROCI. Fourth, a line of inquiry aimed at the development and investigation of a ROCI model for induction also presents an intriguing prospect. And lastly, all of these efforts could be strengthened by further research into the financial, political and structural constraints that hinder the work of middle level teacher education. Studies that illustrate how teacher education programs are creatively navigating these challenges would also contribute useful resources to the field.

Additionally, each iteration of ROCI described above could produce valuable descriptive research regarding 1) what these characteristics could look like in different content areas, classrooms, and schools, and 2) the impact of innovations created on a variety of factors including, for example, student perceptions of their learning environment, motivation, and student learning outcomes. In this way, by supporting student teacher, in-service teacher, school administrator, and hybrid teacher educator participation in ROCI, multiple opportunities for research into reform-oriented teaching are made possible. Among others, examples include research that investigates the impact of newly developed approaches on the role of the teacher in the classroom, administrator in the school, and hybrid teacher educator in the program; the classroom/school culture; student learning; and student perceptions of their learning experiences.

Conclusion

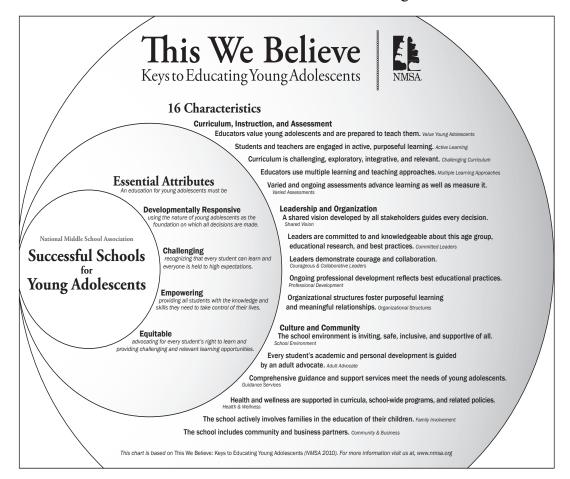
This research bears several implications for teacher education and professional development. First, the experiences of the student teachers that engaged in ROCI highlight the need for teacher education curricula that prepares student teachers for reform-oriented student teaching. Specifically, the work of reform-oriented student teaching could be facilitated by a shift towards practice-based pedagogies as well as explicit preparation in skills such as collaboration, strategic communication, flexibility and patience. Second, building from the encouraging finding that ROCI was supportive of reform-oriented innovation despite multiple challenges, ROCI is proposed as a framework for building capacity in reform-oriented student teaching. Variations of ROCI could be especially powerful as collaborative professional development with partnership schools, reform-oriented support for mentor and student teachers, and induction support for new College of Education graduates. And lastly, since the findings from this research further underscore the importance of school-university partnerships to the work of supporting reform-oriented teaching, this work calls attention to the need to address the financial, political, and structural challenges that make this work difficult. With all of these ideas in mind, I have proposed a research agenda to further investigate ROCI as a means to strengthen the effects of specialized middle level teacher education on the practices of student teachers, in-service teachers, and school administrators.

In closing, I end by returning to the original quandary that motivated this work--preparing teachers in the space between *what is* and *what could be*. As a doctoral student
in teacher education, I am frequently asked, "Why teach?" or "Why education?" In
answer, I often call upon the words of Ira Shor (1999), responding that I teach because

"we live in a world not yet finished, just, or humane" (p. 1). Teaching in this "world not yet finished" requires a particular view of teaching as inquiry, as searching, as unending responsiveness in a continually evolving world. For me, this is the crux of the call to teach---to question and engage others in questioning *what is*, to collaboratively envision *what could be*, and to subsequently create new ways of teaching, learning, and being in the world. Pedagogies such as ROCI, that aim to support the development of student teachers and teacher educators as agents of change, as responsive innovators, as collaborators in the continuing work of remaking the world, are thus integral to the work of teaching and learning in a world not yet finished.

APPENDICES

Appendix A 16 Characteristics of Successful Schools for Young Adolescents



From This We Believe: Keys to Educating Young Adolescents (Association for Middle Level Education, 2010, p. 14).

Appendix B Major Goals of Middle Level Education

Major Goals of Middle Level Educators

To become a fully functioning, self-actualized person, each young adolescent should

- Become actively aware of the larger world, asking significant and relevant questions about that
 world and wrestling with big ideas and questions for which there may not be one right answer.
- · Be able to think rationally and critically and express thoughts clearly.
- Read deeply to independently gather, assess, and interpret information from a variety of sources and read avidly for enjoyment and lifelong learning.
- Use digital tools to explore, communicate, and collaborate with the world and learn from the rich and varied resources available.
- Be a good steward of the earth and its resources and a wise and intelligent consumer of the wide array of goods and services available.
- Understand and use the major concepts, skills, and tools of inquiry in the areas of health and
 physical education, language arts, world languages, mathematics, natural and physical sciences,
 and the social sciences.
- Explore music, art, and careers, and recognize their importance to personal growth and learning.
- Develop his or her strengths, particular skills, talents, or interests and have an emerging understanding of his or her potential contributions to society and to personal fulfillment.
- Recognize, articulate, and make responsible, ethical decisions concerning his or her own health and wellness needs.
- Respect and value the diverse ways people look, speak, think, and act within the immediate community and around the world.
- Develop the interpersonal and social skills needed to learn, work, and play with others harmoniously and confidently.
- Assume responsibility for his or her own actions and be cognizant of and ready to accept obligations for the welfare of others.
- Understand local, national, and global civic responsibilities and demonstrate active citizenship
 through participation in endeavors that serve and benefit those larger communities.

From *This We Believe: Keys to Educating Young Adolescents* (Association for Middle Level Education, 2010, p. 11).

Appendix C AERA Proposal 2013

Learning to Teach in the Context of Middle Level Education Reform Objectives

This study aims to inform the emerging body of literature on middle level teacher education, particularly as it concerns supporting middle level teacher candidates in engaging in what Cochran-Smith (1991) has called "teaching against the grain" (p. 279) of the status quo in the context of middle level education reform. As a means to inform the careful design of innovative pedagogies to support middle level student teachers in implementing middle level education reform, this study uses focus group methodology (Bloor, Frankland, Thomas, & Robson, 2001; Morgan, 2002, Stewart, Shamdasani & Rook, 2007; Wilkinson, 1999) to explore the felt needs and ideas of three middle level student teachers as they anticipate teaching against the grain in student teaching. To this end, this study investigates the following research questions:

- 1. What are the felt needs of student teachers committed to middle level education reform as they anticipate teaching against the grain in student teaching?
- 2. What ideas do student teachers committed to middle level education reform have for how middle level teacher education programs could support them in teaching against the grain in student teaching?

Perspectives

Middle level teacher educators, student and in-service teachers committed to middle level education reform face the perplexing task of overcoming the "salience of the traditional" (Zeichner & Tabachnick, 1981) as they struggle to implement the middle school concept (Association for Middle Level Education, 2010), which despite having long been advocated by the Association of Middle Level Education (AMLE), remains inconsistently evident in middle schools nationwide (Bradley, Manzo, & Week, 2000; Dickinson & Butler, 2001; Irvin, Valentine & Clark, 1994; McEwin & Greene, 2010; Wiles & Bondi, 2001). Some exemplary middle level teacher education programs are tackling this challenge by modeling the middle school concept, which is often unfamiliar to teacher candidates, through the organizational design of their teacher education programs (de John & Chadbourne, 2007; Deering, Zuercher, and Apisa, 2010; Stowell, McDaniel & Rios, 1995) and course curricula (Kleine & McBryar, 2009; Stowell, McDaniel & Rios, 1995). Despite these efforts, however, the stalled nature of middle level education reform is such that student teachers are nonetheless likely to be in field placements that reinforce the traditional. As such, while the emergence of specialized middle level teacher education programs is purported as a potential lever for middle level education reform (Dickinson & Butler, 2001), these efforts are complicated by the enormity of the challenge faced by teacher candidates as they attempt to enact reformminded practices in traditional settings.

With these perspectives in mind, the teacher candidate committed to middle level reform not only needs a strong foundation in the reform-minded practices at the core of AMLE's middle school concept, but also must be prepared to navigate what Cochran-Smith (1991)

has called "teaching against the grain" (p. 279) of the status quo as they enter their student teaching experience and begin their career. Careful thought must therefore be given to develop innovative pedagogies to support teacher candidates in teaching against the grain in student teaching. To this end, this study employs focus group methodology as a means to explore the felt needs and ideas of three teacher candidates committed to middle level education reform as they enter their final year of undergraduate work and sit on the precipice of student teaching. Findings from this study are intended to set the stage for the design of pedagogies to support these student teachers in teaching against the grain in student teaching.

Methods and Data Sources

As part of a commitment to develop a pedagogy that is responsive to teacher candidates and privileges their meaning-making, this study works within the research tradition of focus group methodology (Bloor, Frankland, Thomas, & Robson, 2001; Morgan, 2002, Stewart, Shamdasani & Rook, 2007; Wilkinson, 1999). Since focus groups create a social context for meaning-making that is relatively naturalistic and purposely designed to shift the balance of power from the researcher to the participants (Wilkinson, 1999), their use is particularly well-suited to research questions such as these that aim to understand participant perspectives and generate rich and valid insights on complex phenomena (Stewart, Shamdasani & Rook, 2007).

Three students in one section of a middle level teacher education course were purposively selected to participate in this study on the basis that they 1) expressed a clear interest in middle level education reform as evidenced by class discussions and reflections, and 2) raised important questions concerning their impending student teaching experience in the context of middle level education reform. Focus group sessions took place during the summer months preceding participant induction into student teaching according to the Focus Group Schedule outlined in Table 1 below.

Table 1 Focus Group Schedule	
Session	Agenda
Focus Group Session #1	Introductions
_	Norm-setting (review of participation guidelines)
	Discussion of RQ#1
Focus Group Session #2	Review and discussion of proposed themes from RQ#1
	Discussion of RQ#2
Focus Group Session #3	Review and discussion of proposed themes from RQ#1
	and RQ#2
	Final comments
Table 1	

After each focus group session, data sources including transcripts of focus group audio and researcher memos were analyzed to identify emergent themes. Proposed themes were subsequently brought to the next focus group session for discussion and feedback based on the following prompts: *Does this capture what we discussed?* and *Did we miss anything?* In this way, focus group participants were directly involved in the research process through the development of the preliminary results discussed below.

Preliminary Results

The following preliminary results provide compelling insights into the felt needs and ideas of middle level teacher candidates committed to middle level education reform.

RQ#1: What are the felt needs of student teachers committed to middle level education reform as they anticipate teaching against the grain in student teaching?

Discussion of this first research question revealed that the felt needs of participants were clustered around three pervasive themes: relational support, structural support, and the permission to take risks without fear of failure.

Relational support. Participants expressed an overarching concern that they would be placed with a cooperating teacher with no interest in middle level education reform or the reform-minded AMLE middle school concept and that as a result, they would be either prohibited from experimenting with reform-minded practices or left to their own devices. Similarly, they worried that even if their cooperating teacher was supportive, that any reform-minded changes to practice would be viewed as the work of the student teacher, thus resulting in an inequity of responsibility, requiring the novice to inquire into teaching against the grain alone, a possibility which participants felt would be not only unfair but also at the expense of their learning and that of their prospective students. This concern underscores the importance of cooperating teacher selection in middle level teacher education, particularly as it concerns a disposition towards inquiry and a commitment to middle level education reform.

Structural support. In addition to the felt need that their cooperative teachers be supportive of efforts to teach against the grain, participants also worried that the school where they would be student teaching would not be supportive of the reform-minded AMLE vision and that a lack of administrative support would make teaching against the grain a decidedly uphill, if not impossible, battle. One participant candidly summed this concern up as follows: *My biggest fear is that I end up at a school where I can't do this and am stuck doing the traditional.* This fear reveals the tension experienced by novices learning to teach in the context of middle level educational reform. If middle level teacher preparation programs are to support novice teachers in teaching against the grain, they must form partnerships with local middle schools that position all parties to be actively engaged in middle level education reform efforts.

Likewise, time emerged as an important structural concern, both as it would be allocated by school-wide structures such as planning periods and meetings, as well as the time needed to complete university requirements such as coursework, university supervision, and performance-based assessments. Time constraints were discussed as both finite and inflexible, suggesting that participants neither felt empowered to affect time structures nor did they trust that they would reasonable or stream-lined with middle level education reform efforts.

Permission to take risks without fear of failure. In their commitment to middle level education reform, participants were decidedly open to taking risks and experimenting in the classroom. Nonetheless, they worried that if they implemented changes, especially in the absence of appropriate relational and structural support, that they would fail and that this failure would then be viewed as a reflection on their teaching

potential as well as the AMLE reform-minded vision. This concern highlights the tension between assessing student teacher proficiency and creating a context of innovation and inquiry. How can we ensure that ongoing assessments are not in conflict with our commitment to inquiry and innovation in the context of education reform?

RQ#2: What ideas do student teachers committed to middle level education reform have for how middle level teacher education programs could support them in teaching against the grain in student teaching?

Building off of the discussion of research question #1, the focus group then turned its attention to brainstorming ideas for addressing these felt needs. Through the course of the three focus group sessions, these ideas eventually evolved into a vision for structured collaboration around a wisely selected goal.

Structured collaboration around a wisely selected goal. Based on the aforementioned felt needs, focus group participants were united in their insistence that the efforts of student teachers committed to middle level education reform would be maximized by a context of structured collaboration between student and cooperating teachers inquiring into reform-minded teaching in their classrooms. Such collaborations would begin with the careful selection of cooperating teachers also interested in teaching against the grain and would ultimately be supported by an articulation that inquiring into reform-minded teaching at the middle level was a central part of the work of middle school-university partnerships. As such, structural support would be reflected in the allocation of time during the school day for inquiry and reflection as well as university requirements (coursework, supervision, and performance-based assessments) that are aligned with inquiring into middle level education reform. In addition to the centrality of a productive partnership between student and cooperating teachers, participants also underscored the importance of peer support and the need for groups of student teachers, like this focus group, to have time to meet, discuss, and reflect collaboratively around efforts to teach against the grain.

The centrality of a wisely selected goal around which to center the efforts of such structured collaboration emerged in discussion as an important requirement for the success of such an endeavor. While participants expressed a commitment to the seamlessness of the reform-minded AMLE middle school concept, the limitations of time and a commitment to feasibility revealed the necessity for each student and cooperating teacher pair to select one reform-minded goal upon which to focus their efforts to teach against the grain. As such, goals would be selected by student and cooperating teacher pairs on the basis that they were reform-minded, implementable, aligned with school goals, and interesting to the teachers.

Scholarly Significance of the Study

This research informs the emerging body of literature on middle level teacher education, particularly as it concerns supporting student teachers in teaching against the grain in the context of middle level education reform. By placing emphasis on the perspectives of middle level student teachers committed to middle level reform, this study presents a unique opportunity to give student teachers a voice in the design of their own education. The resulting vision for structured collaboration around a wisely selected goal provides a concrete suggestion for middle level teacher education programs seeking to contribute to

middle level education reform in ways that are responsive to the felt needs of student teachers. In this way, this study sets the stage for the design of pedagogies to foster such collaboration as well as further research into the implementation and results of such pedagogies in middle level teacher education.

References

- Association for Middle Level Education. (2010). *This we believe: Keys to educating young adolescents*. Westerville, Ohio: Association for Middle Level Education.
- Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus groups in social research*. Thousand Oaks, CA: Sage.
- Bradley, A., Manzo, K. K., & Week, E. (2000, October 4). The weak link. *Education Week*, 20(5) p. 31.
- Cochran-Smith, M. (1991). Learning to teach against the grain. *Harvard educational review*, 61(3), 279–311.
- De Jong, T., & Chadbourne, R. (2007). A challenge for middle grades teacher education programs to practice what they preach: An Australian experience. *Middle School Journal*, 38(3), 10–18.
- Deering, P. D., Zuercher, D., & Apisa, S. A. (2010). This we believe: Educators of young adolescents are just like the students-as learners! *Middle School Journal*, 41(4), 14–26.
- Dickinson, T. S., & Butler, D. A. (2001). Reinventing the middle school. *Middle School Journal*, 33(1), 7–13.
- Irvin, J. L., & Valentine, J. W. (1994). Essential elements of a true middle school: What should be vs. what is. *Middle School Journal*, 26(1), 54.
- Kleine, K. L. M., & McBryar, L. S. (2009). Student teachers experience middle grades curriculum. *Middle School Journal*, 40(3), 28–36.
- McEwin, C. K., & Greene, M. W. (2010). Results and recommendations from the 2009 national surveys of randomly selected and highly successful middle level schools. *Middle School Journal*, 42(1), 49–63.
- Morgan, D.L. (2002). Focus group interviewing. In J.F. Gubrium & J.A. Holstein (Eds.), Handbook of interviewing research: Context and method (p. 141–159). Thousand Oaks, CA: Sage.
- Stewart, D.W., Shamdasani, P.N., & Rook, D.W. (2007). Focus groups: Theory and practice, 2nd edition. Thousand Oaks, CA: Sage.
- Stowell, L. P., & McDaniel, J. E. (1995). Fostering change for democratic middle schools through teacher education. *Middle School Journal*, 26(5), 3.
- Wiles, J., & Bondi, J. (2001). *The new American middle school*. Columbus: Merril Prentice Hall.
- Wilkinson, S. (2004). Focus groups: A feminist method. In S.N. Hesse-Biber & M.L. Yaiser (Eds.), *Feminist perspectives on social research* (p. 271–295). New York: Oxford University Press.

Appendix D Example Collaborative Inquiry Cycle #1

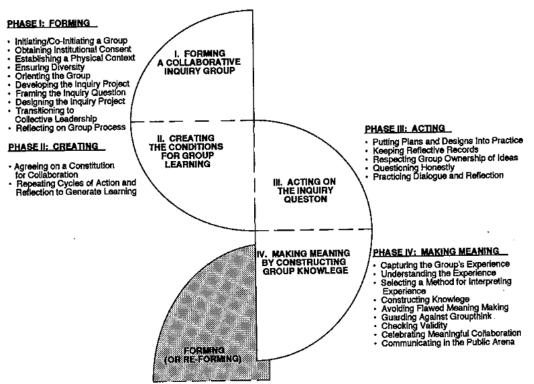


Figure 1.1: A Four-Phase Framework of the Collaborative Inquiry Process

From "Collaborative inquiry in practice" (Bray et al., 2000)

Appendix E Example Collaborative Inquiry Cycle #2

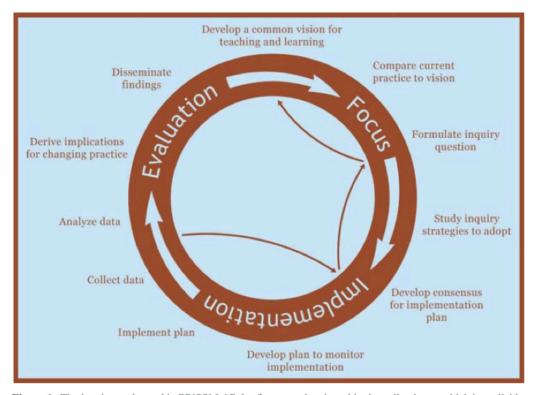


Figure 1. The inquiry cycle used in PRiSSM. [Color figure can be viewed in the online issue, which is available at www.interscience.wiley.com.]

From "Teachers' collaborative inquiry and professional growth: Should we be optimistic?" (Nelson, 2009, p. 553)

ROCI AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

Appendix F Example Collaborative Inquiry Cycle #3

Figure 1
An Inquiry-Based, Collaborative Approach to Middle Level Reform



From "What's driving you crazy? A question to drive collaborative inquiry-based middle school reform" (Deering, P. D., Perez, A., Wong, C., Leong, D., & Yep, J., 2003, p. 32).

ROCI AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

Appendix G Middle School Student Final Reflection Prompts

- 1. Think about the work you did in Mod 2 to promote a positive school culture at your school. What were some of the highlights of this experience for you?
- 2. Describe your favorite part of this project.
- 3. What was so great about the part you described in question #2?
- 4. What was your least favorite part of this project? Why did you dislike it?
- 5. Do you feel that this project gave you a voice in your school? **Circle one: Yes No** Why or why not?
- 6. Was the work you did in Mod 2 to promote a positive school culture important to you? **Circle one: Yes No** Why or why not?
- 7. Do you feel that this project made a difference in your school? **Circle one: Yes No** Why or why not?
- 9. Would you want to do a project like this again? Circle one: Yes No Why or why not?
- 10. If you had to do this project again, what would you want to do differently? Why?
- 11. What lesson are you taking away from this project?

Appendix H Student Teacher Interview Protocol

Questions used in each semi-structured interview		
Sequence	Interview Questions (Study-Associated Research Question)	
Pre-ROCI Interview	1. Consider the middle school concept. To what extent is it in place at your field placement? (Start general than point out individual characteristics.) Why do you think this is? (S2-ALL)	
	2. How do-able do you think the middle school concept is? Explain. (Start general than zoom in on individual characteristics.) (S2-ALL)	
	3. How prepared do you feel to implement the characteristics associated with the middle school concept? Explain. Which do you feel most prepared for? Least? (S2-ALL)	
	4. How does middle level education reform happen? In other words, how do schools change? (S2-RQ#4)	
	5. How can teachers participate in (advance) middle level education reform? (S2-RQ#4)	
	6. What does it take for teachers to participate in middle level education reform at the local level? (Wait for response to general then ask: What supports, preparation, knowledge do they need?) (S2-RQ#4)	
Post-ROCI Interview	1. Consider the middle school concept. To what extent is it in place at your field placement? (Start general than point out individual characteristics.) Why do you think this is? (S2-ALL)	
	2. How do-able do you think the middle school concept is? Explain. (Start general than zoom in on individual characteristics.) (S2-ALL)	
	3. How prepared do you feel to implement the characteristics associated with the middle school concept? Explain. Which do you feel most prepared for? Least? (S2-ALL)	
	4. Prior to engaging in ROCI, you participated in an interview in which we discussed the following prompts (See 4-6 in Pre-ROCI Interview). To what extent do you still agree with your responses? (Take a look at highlighted portions of the Pre-ROCI interview transcript together.) (S2-RQ#4)	
	5. Let's discuss the reflection you prepared.	
	 a. Tell me about the challenges you faced as we engaged in ROCI. (S2-RQ#1) b. What strategies, if at all, did you use to cope with these 	
	challenges? (S2-RQ#3; #4)	
	(Protocol Table continued on next page)	

ROCI AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

Questions used in each semi-structured interview		
Sequence	Interview Questions (Study-Associated Research Question)	
Post-ROCI Interview	 c. Tell me about the benefits, if any, you experienced as we engaged in ROCI. (S2-RQ#2) d. What have you learned about what it takes to participate in middle level education reform? (S2-RQ#3; #4) e. What ideas do you have for making the ROCI experience better? (S2-RQ#1, #3) f. In what ways, if any, does your ROCI experience inform your next steps as a first year teacher entering into the profession? In other words, how might you use what you have learned through this experience next year? (S2-RQ#3; #4) 	

Appendix I Excerpt from Coded Memo and Transcribed Segments

~	•		1		
C	h	a	10	1	Ω
•	и	а			•

Post-ROCI Interview

RQ: What benefits, if at all, did you experience through the MLCIC?

Responses in Memo

Transcribed segments

Overwhelmed but now more comfortable

I was very overwhelmed at doing "this" at the start of the year

I feel a lot more comfortable with this now

- o I have a lot better idea of how to incorporate student choice, especially in terms of giving them different methods to complete their work, options of making a ppt, diagram, paper, etc
- Giving space for them to get creative

Relationship with students

- I didn't realize how much it meant to them to have choice and input
- It made them a lot more comfortable (student reported she felt she had a better learning environment)
- Realized throughout and by looking at the final reflections

Overwhelmed but now more comfortable

Coming into this year I was completely overwhelmed at the idea of doing "this" (holds up characteristics) in my classroom. I thought it was going to be so difficult and honestly it was very difficult in my math placement and a lot of that had to do with mentor teacher. But being in my science classroom where my mentor teacher was like "Do whatever you want to do" and I was like "ok!" and I just had all kinds of ideas and kept running with it. Yeah I just, I feel a lot more comfortable with this. I have a lot better idea of how to incorporate student choice. Especially in terms of giving them different methods to complete their work in, giving them options of making a ppt, diagram, paper, things like that. I felt a lot better doing that. And just letting them to get creative. (B: Reform-oriented teaching; Learning to actually do this; Providing student choice) I was even able to do that in my math classroom because I was able to create the 3rd quarter project. (B: Reform-oriented teaching; Developing habits of mind)

Relationship with students

Charlie: One of the big things was the relationship I developed with students. I didn't realize how much it meant to them to have that choice and have the opportunity to give feedback and to take that into account because they had never seen that before. It made them a lot more comfortable and that one comment on the reflection meant a lot to me---that she felt she had a better learning environment by having more input. Me: When you say that you didn't realize...is that something you realized throughout or by looking at the reflections?

Charlie: Both.

(B: Relationship with students; Deeper insight into student perspectives; Reflections)

Appendix J Excerpt from a Data Display for "Benefits: Learning how to actually *do* this"

Learning how to				
actually do this	Associated Units of data			
Do; Theory to	Danni: This was a valuable experience and very important work so to me. It's so easy to sign up for something, you know			
practice	what I mean? I believe that is awesome but then to actually fully take the theory and turn it into practice. I think that is			
	something completely different. Not everybody got a chance to do that.			
Do; Student	Charlie: Coming into this year I was completely overwhelmed at the idea of doing "this" (holds up characteristics) in my			
choice	classroom. I thought it was going to be so difficult and honestly it was very difficult in my math placement and a lot of that			
	had to do with mentor teacher. But being in my science classroom where my mentor teacher was like "Do whatever you want			
	to do" and I was like "ok!" and I just had all kinds of ideas and kept running with it. Yeah I just, I feel a lot more comfortable			
	with this. I have a lot better idea of how to incorporate student choice. Especially in terms of giving them different methods to complete their work in, giving them options of making a ppt, diagram, paper, things like that. I felt a lot better doing that. And			
	just letting them to get creative.			
Do; Regrouping	Bobbi: The one I said earlier—just telling the kids to keep on task. That's something I really wannaand I did group them			
Do, Regrouping	differently. If they were in a big group where there was a problem, I would split them up into smaller groups where they still			
	had computers and everything.			
Do; hands-joined	Bobbi: Oh yeah, and for me, knowing when to be hands-on and hands-off, knowing when to help students and knowing when			
learning	to let them struggle through it on their own. Because I have a tendency to want to rescue. When I see them struggling, I want			
C	to say "oh no, no, let me help" but I know that part of them learning this is, they're not going to really learn if I'm just there			
	as their safety net all of the time.			
Do; Cultivating	Ray: I'm struggling with getting them right now to positively think of programs that we could do. I had a group of kids who			
student	just stood there for a half hour today going "Oh the chicken is whack, we need different chicken. It's not cooked all the way."			
engagement	And I'm like, that's not constructive, you need to think of constructive waysso today I talked about symbiotic relationships			
	as our warm-up thing. I talked about Finding Nemo and the anemone and how they both work well with each other. That's			
	what the students need to do with the administrators so our programs need to be positive for both.			
Do; Cultivating	Charlie: Encouraging them to gear their research towards things that they were interested in themselves helped a lot. Like I			
student	had that group of boys for the Spirit Week Deck the Halls decorating that was not at all interested in researching their			
engagement	assigned university because no one had heard of it and frankly they didn't care about it. But you know, I asked them what			
	they would like to research about the university, and they were all like "sports!" and I was like "Fine, tell us all about sports."			
	I think that helped a lot. And just asking them what kinds of things they're going to look for when they research colleges and			
	having them research that. It made it more relevant to them. In general I tried to allow for choices as much as possible.			

ROCI AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

Appendix K Student Teacher Reflection Prompts

Reflection Questions

Record your ideas below. (Feel free to use bullet points.)

- 1. What challenges, if any, have you faced in participating in Reform-Oriented Collaborative Inquiry (ROCI)?
- 2. What strategies, if any, did you use to cope with these challenges?
- 3. What benefits, if any, did you experience as you engaged in ROCI?
- 4. What have you learned about what it takes to participate in middle level education reform at the local level?

ROCI AS A PEDAGOGY FOR STUDENT TEACHING IN MIDDLE SCHOOL

Appendix L

Excerpt from Group-created Plan for the Investigation Phase of the Social Action Project

January 22- Day 1 (W)

- 1. Prime: talk about school culture, EQ on the wall
- 2. Pep Talk: Kid President
- 3. Discussion following video
 - a. we are a team
 - b. do something great
 - c. don't be boring
 - d. don't stop believing
- 4. Introduce the essential question (EQ): *How can we promote a positive culture at Lakeview Middle School?*
- 5. Remind student WHY we are doing this (THEY selected the topic!)
- 6. Coming Up: Let students know we will be discussing ideas for creating a school survey

January 24- Day 2 (F)

Gandhi Ouote:

"If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him. ... We need not wait to see what others do."

- 1. Students look at example surveys (IDEA? Others?) in groups to identify/build a survey
- 2. Students should think of a couple of ways that we can get collect and organize the data

January 28- Day 3 (T)

Quotes:

Ideas must work through the brains and arms of good and brave men, or they are no better than dreams." -Ralph Waldo Emerson

"Man's mind, once stretched by a great idea, never regains its original dimensions." - Oliver Wendell Holmes

- 1. Finalize survey
- 2. Determine best way (class vote) to proceed
- 3. Begin internal class survey
- 4. Coming Up: Compile date and discuss trends
 - What does the data show us?
 - Are any of you surprised at the results?
 - How does this make you feel?

Appendix M S.O.U.L. Proposal

Why we want Lakeview Middle School S.O.U.L.

We would like to start a student leadership club called "LMS S.O.U.L. (Students of United Leadership). We want to create this club because we would like to help students learn how to become leaders at LMS so that we can make a difference in our school, community, and lives. Student leadership is a win-win because both students and teachers would benefit from working together to make our school and community a better place. This could help to create a positive school culture at LMS because it would encourage students to participate in their education and give their time or ideas on making their school a better place. If we have a school where teachers are allied with students, we could accomplish anything. We would talk and learn about: what it means to be a leader, problem solving skills, career skills, how to include student voice in our school, how to create and maintain a positive school culture, use student input/feedback to improve the school, and building student-teacher relationships that could help us make LMS the best it can be.

Who will be in LMS S.O.U.L.?

LMS S.O.U.L. is open to all students in 6th, 7th, and 8th grades who want to learn how to be leaders and who want to share and bring their ideas for how to make LMS great to life. We could advertise for LMS S.O.U.L. by putting posters up in the school, passing out fliers, going on the announcements, and having an assembly.

What will LMS S.O.U.L. do?

We want to help students at LMS learn to be more like leaders. We would focus on individual, school, and community practices that may need improvement. We have some ideas for possible activities such as creating a "Communication with Peers" (CWP) program, where student ambassadors would be available to help students who have problems in and out of school. Some of our other ideas for projects, activities and responsibilities are:

- Create a PBIS program to help make LMS have a better atmosphere by encouraging positive behavior and school pride through recognition and rewards for good deeds
- Create social activities/clubs that students would like to have and would enjoy
- Enhance Spirit Week by creating more engaging activities
- Create and advertise quarterly competitions for all the grades where the winning team from each grade gets a prize. For example, the team (from each grade) with the highest GPA at the end of each quarter wins a block party.
- Visiting feeder elementary schools as role models for future students
- Escorting guests around the school during school functions (Back to School Night)
- Give CWP ambassadors a special uniform to make them identifiable to other students.

Aside from ideas for activities, we would discuss student leadership topics with each other. Our main goal is to turn LMS students into builders, creators, and strong leaders that can make a difference in today's world.

When/Where will LMS S.O.U.L. meetings take place?

The LMS S.O.U.L. team would like to meet on Wednesdays after school starting at the beginning of next school year. Our meetings would last for one and a half hours. We would meet in a cooperating/mentor teacher's classroom.

Needs for LMS S.O.U.L.

We realize that we as students cannot do this all on our own. We know that for LMS S.O.U.L. to rise up we need the cooperation and collaboration of teachers, students, administration, and families working together. The needs for our club are club approval, cooperating teachers, permission slips, and raw materials. We first need club approval from administration. We need cooperating teachers to mentor us on how to be leaders and to help us with the club planning and resources. Students and teachers would collaboratively share, discuss, and plan ideas for becoming leaders and improving LMS. The LMS S.O.U.L. cooperating teachers would be those teachers who feel like they can help club members learn to become strong leaders in and out of the school. We will need permission slips for parents to sign so that students could stay after school. The parents of LMS S.O.U.L. members could also provide some items the club needs such as raw materials. Some of the materials we would need are: pens, pencils, markers, banner paper, posters, paper, paint, scissors, tape, and glue.

Thank you for taking the time to read our proposal. We are very excited for what LMS S.O.U.L. can accomplish at our school. We hope that you will agree that LMS S.O.U.L. can make a positive difference in our school.

REFERENCES

- Alexander, W. M., & Williams, E. L. (1965). Schools for the middle years. *Educational Leadership*, 23(3), 217–223.
- Allen, J. (2006). Beginning teacher socialization in the workplace: Some perspectives from the literature. In B. Walker Gibbs & B.A. Knight (Eds.), *Re-Visioning**Research and Knowledge for the 21st Century (pp. 101–115). Salisbury, Qld: Post Pressed
- Allen, M. B. (2005). *Eight questions on teacher recruitment and retention: What does the research say?* Denver: CO: Education Commission of the States.
- Arth, A., Johnston, J. H., Lounsbury, J., Toepfer Jr, C. F., & Melton, G. E. (1985). *An agenda for excellence at the middle level*. Reston, VA: National Association of Secondary School Principals.
- Association for Middle Level Education. (2006). AMLE position statement: Professional preparation of middle level teachers. Retrieved from http://www.amle.org/AboutAMLE/PositionStatements/ProfessionalPreparation/tabid/287/Default.aspx
- Association for Middle Level Education. (2010). *This we believe: Keys to educating young adolescents*. Westerville, OH: Association for Middle Level Education.
- Association for Middle Level Education. (2012). This we believe in action: Implementing successful middle schools. Westerville, OH: Association for Middle Level Education.

- Association for Middle Level Education. (2013). AMLE standards on middle level teacher preparation. Retrieved from http://www.amle.org/AboutAMLE/ProfessionalPreparation/AMLEStandards.aspx
- Association for Middle Level Education. (2014). *AMLE*. Retrieved from http://www.amle.org/
- Ball, D., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497–511.
- Beane, J. (1991). The middle school: The natural home of integrated curriculum. *Educational Leadership*, 49(2), 9–13.
- Beane, J. (1993). *A middle school curriculum: From rhetoric to reality*. Westerville, OH: National Middle School Association.
- Beane, J. (2005). A reason to teach: Creating classrooms of dignity and hope.

 Portsmouth, New Hampshire: Heinemann.
- Bhabha, H. (1990). The third space. In J. Rutherford (Ed.) *Identity: Community, culture, difference* (pp. 207–221). London: Lawrence and Wishart.
- Billig, S. H. (2000). Research on K-12 school-based service-learning. *Phi Delta Kappan*, 81(9), 658–664.
- Billig, S. H. (2011). Making the most of your time: Implementing the K-12 service-learning standards for quality practice. *Prevention Researcher*, *18*(1), 8–13.
- Blank, M. J., Berg, A., & Melaville, A. (2006). *Community-based learning: Engaging students for success and citizenship*. Retrieved from http://www.communityschools.org/assets/1/AssetManager/CBL_Book_1_27_06. pdf

- Bogdan, R., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Boyle-Baise, M., & McIntyre, D. J. (2008). What kind of experience? Preparing teachers in PDS or community settings. *Handbook of Research on Teacher Education*, 307–330.
- Bradley, A., Manzo, K. K., & Week, E. (2000). The weak link. *Education Week*, 20(5) p.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn*. Washington, DC: National Academy Press.
- Bray, J. N., Lee, J., Smith, L., & Yorks, L. (2000). *Collaborative inquiry in practice: action, reflection, and meaning making.* Thousand Oaks, CA: Sage Publications.
- Brooks, A., & Watkins, K. E. (1994). *The emerging power of action inquiry technologies*.

 San Francisco: Jossey-Bass Inc Pub.
- Butin, D. (2003). Of what use is it? Multiple conceptualizations of service learning within education. *The Teachers College Record*, *105*(9), 1674–1692.
- Butler, D. L., Lauscher, H. N., Jarvis-Selinger, S., & Beckingham, B. (2004).
 Collaboration and self-regulation in teachers' professional development. *Teaching*& *Teacher Education*, 20(5), 435–455.
- Butler, D. L., & Schnellert, L. (2012). Collaborative inquiry in teacher professional development. *Teaching and Teacher Education*, 28, 1206–1220
- Carnegie Council on Adolescent Development. (1989). Turning points: Preparing

 American youth for the 21st century: The report of the task force on education of young adolescents. New York: Carnegie Corporation.

- Caskey, M. M., & Anfara, V. A., Jr. (2007). Research summary: Young adolescents' developmental characteristics. Retrieved from http://www.nmsa.org/Research/Research/Summaries/DevelopmentalCharacteristics/tabid/1414/Default.aspx
- Clark, R. W. (1999). *Effective professional development schools*. San Francisco: Jossey Bass.
- Clayton, P. H., Bringle, R. G., & Hatcher, J. A. (2013a). Research on service learning:

 Conceptual frameworks and assessment: Communities, institutions, and
 partnerships. Stylus Pub.
- Clayton, P. H., Bringle, R. G., & Hatcher, J. A. (2013b). Research on service learning:

 Conceptual frameworks and assessment: Students and faculty. Stylus Pub.
- Cochran-Smith, M. (1991a). Learning to teach against the grain. *Harvard Educational Review*, *61*(3), 279–311.
- Cochran-Smith, M. (1991b). Reinventing student teaching. *Journal of Teacher Education*, 42(2), 104–118.
- Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice:

 Teacher learning in communities. *Review of Research in Education*, *24*, 249–305.
- Coxe, W. W. (1930). When is a school a junior high school? *Junior-Senior High School Clearing House*, 72–79.
- Cuban, L. (1992). What happens to reforms that last? The case of the junior high school.

 *American Educational Research Journal, 29(2), 227–251.
- Darling-Hammond, L. (2000). *Studies of excellence in teacher education: Preparation at the graduate level*. Washington, DC: AACTE Publications.

- Darling-Hammond, L. (Ed.). (2005). *Professional development schools: schools for developing a profession* (2nd ed.). New York: Teachers College Press.
- Darling-Hammond, L. (2006). Powerful teacher education: Lessons from exemplary programs. San Francisco: Jossey Bass.
- Davis, G. A., & Jackson, A. W. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York: Teachers College Press.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, *26*(3-4), 325–346.
- Deering, P. D., Perez, A., Wong, C., Leong, D., & Yep, J. (2003). What's driving you crazy? A question to drive collaborative inquiry-based middle school reform.

 Middle School Journal, 34(5), 31–37.
- Deering, P. D., Zuercher, D., & Apisa, S. A. (2010). This we believe: Educators of young adolescents are just like the students-as learners! *Middle School Journal*, 41(4), 14–26.
- De Jong, T., & Chadbourne, R. (2007). A challenge for middle grades teacher education programs to practice what they preach: An Australian experience. *Middle School Journal*, 38(3), 10–18.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: The Macmillan Company.
- Dewey, J. (1963). Experience and education. New York: Collier Books.
- Dickinson, T. S., & Butler, D. A. (2001). Reinventing the middle school. *Middle School Journal*, *33*(1), 7–13.

- Douglass, A. (1945). The persistent problems of the junior high school. *California Journal of Secondary Education*, 20, 112–120.
- Erb, T. O. (2001). *This we believe--and now we must act*. Westerville, OH: National Middle School Assn.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119-161) New York: Macmillan.
- Ference, R., & McDowell, J. (2005). Essential elements of specialized middle level teacher preparation programs. *Middle School Journal*, *36*(3), 4–10.
- Giroux, H. (2009). Teacher education and democratic schooling. *The Critical Pedagogy**Reader*, 438–459.
- Goodnough, K. (2010). Teacher learning and collaborative action research: Generating a "knowledge-of-practice" in the context of Science education. *Journal of Science Teacher Education*, 21(8), 917–935.
- Graber, K. C. (1991). Studentship in pre-service teacher education: a qualitative study of undergraduate students in physical education. *Research Quarterly for Exercise* and Sport, 62(1), 41–51.
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009).

 Teaching practice: A cross-professional perspective. *The Teachers College*Record, 111(9), 2055–2100.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching*, *15*(2), 273–289.

- Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal*, 45(1), 184–205.
- Hagenauer, G., & Hascher, T. (2010). Learning enjoyment in early adolescence. *Educational Research and Evaluation*, 16(6), 495–516.
- Hansen, M. D. (2010). A comparison of elementary, middle, and high school teachers' orientations toward motivating students (Doctoral dissertation). Retrieved from http://www.proquest.com/en-US/products/dissertations/individuals.shtml
- Harper, D. (2014). *Encourage*. Retrieved from http://www.etymonline.com/index.php?term=encourage
- Howard, A. W. (1965). The Carnegie unit: Is this bugaboo still with us? *The Clearing House*, 40(3), 135–139.
- Huffman, D., & Kalnin, J. (2003). Collaborative inquiry to make data-based decisions in schools. *Teaching & Teacher Education*, 19(6), 569.
- Hung, H.-T., & Yeh, H.-C. (2013). Forming a change environment to encourage professional development through a teacher study group. *Teaching & Teacher Education*, *36*, 153–165.
- IDEA: The Institute for Democratic Education in America. (2014). *Institute for Democratic Education in America* | *IDEA*. Retrieved from http://www.democraticeducation.org/
- IDEA: Institute for Democratic Education in America. (2013). What's happening at your school? A snapshot evaluation. Retrieved from http://democraticeducation.org/downloads/idea school-assessment-snapshot.pdf

- Irvin, J. L., & Valentine, J. W. (1994). Essential elements of a true middle school: What should be vs. what is. *Middle School Journal*, 26(1), 54.
- Kaufmann, J. (2007). Teaching quality/induction programs and mentoring–Defining the terms and identifying state policies. *Washington, DC: Education Commission of the States*.
- Kleine, K. L. M., & McBryar, L. S. (2009). Preservice teachers experience middle grades curriculum. *Middle School Journal*, 40(3), 28–36.
- Korthagen, F. (2011). Making teacher education relevant for practice: The pedagogy of realistic teacher education. *Orbis Scholae*, *5*(2), 31–50.
- Korthagen, F. A., & Kessels, J. P. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(4), 4–17.
- Lampert, M., Franke, M. L., Kazemi, E., Ghousseini, H., Turrou, A. C., Beasley, H., ...

 Crowe, K. (2013). Keeping It complex: Using rehearsals to support novice teacher learning of ambitious teaching. *Journal of Teacher Education*, *64*(3), 226–243.
- Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- Lounsbury, J. H., & Douglass, H. R. (1965). Recent trends in junior high school practices 1954-1964. *NASSP Bulletin*, 49(302), 87–98.
- Marchand, G. C. (2008). *Developing a sense of academic ownership: A longitudinal analysis* (Doctoral dissertation). Retrieved from http://www.proquest.com/en-US/products/dissertations/individuals.shtml

- Marinell, W. H., & Coca, V. M. (2013). Who stays and who leaves: Findings from a three-part study of teacher turnover in NYC middle schools. New York: Research Alliance for NY City Schools. Retrieved from http://media.ranycs.org/2013/003
- Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research*. Thousand Oaks, CA: Sage Publications.
- Martin, S. D., Snow, J. L., & Franklin Torrez, C. A. (2011). Navigating the terrain of third space: Tensions with/in relationships in school-university partnerships.

 **Journal of Teacher Education, 62(3), 299–311.
- McDaniel, J. E., & Stowell, L. P. (1994). Do as we do and as we say: Modeling curriculum integration in teacher education. *Middle School Journal*, 26(2), 14.
- McDonald, M., Kazemi, E., & Kavanagh, S. S. (2013). Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education*, *64*(5), 378–386.
- McEwin, C. K., Dickinson, T. S., & Jenkins, D. M. (2003). *America's middle schools in the new century: Status and progress*. Westerville, OH: National Middle School Association.
- McEwin, C. K., & Greene, M. W. (2010). Results and recommendations from the 2009 national surveys of randomly selected and highly successful middle level schools. *Middle School Journal*, 42(1), 49–63.
- McNeil, B., Reeder, N., Rich, J. (2012). *A framework of outcomes for young people*.

 London: Young Foundation.

- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student self-and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology*, 81(2), 247.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: SAGE Publications, Inc.
- Montague, B (Producer). (2013). A pep talk from kid president to you [Video file].

 Retrieved from https://www.youtube.com/watch?v=l-gQLqv9f4o
- National Council for Accreditation of Teacher Education. (2014). *Professional development schools*. Retrieved from http://www.ncate.org/ProfessionalDevelopmentSchools/tabid/497/Default.aspx
- National Forum to Accelerate Middle-Grades Reform. (2014). *The National Forum to Accelerate Middle-Grades Reform*. Retrieved from http://www.middlegradesforum.org/
- National Forum to Accelerate Middle-Grades Reform. (2014). *Schools to watch rubric*.

 Retrieved from http://www.middlegradesforum.org/index.php/rubric
- National Forum to Accelerate Middle-Grades Reform (2014). What is Schools to Watch®.

 Retrieved from http://www.middlegradesforum.org/index.php/schools-to-watch/what-is-schools-to-watch
- National Middle School Association (2003). This we believe: Successful schools for young adolescents: A position paper of the National Middle School Association.

 Westerville, OH: National Middle School Assn.

- National Middle School Association (2010). *Research and resources in support of This We Believe*. Westerville, OH: National Middle School Association.
- National Service Learning Clearinghouse (2013). *What is service-learning?* Retrieved March 12, 2013 from http://www.servicelearning.org/what-service-learning
- National Youth Leadership Council (2008). *K-12 service-learning standards for quality practice*. Retrieved from http://www.nylc.org/k-12-service-learning-standards-quality-practice
- National Youth Leadership Council (2013). *The IPARD framework*. Retrieved from https://gsn-newdemo2.s3.amazonaws.com/documents/1165/original/ IPARD.pdf?1394831499
- Nelson, T. H. (2009). Teachers' collaborative inquiry and professional growth: Should we be optimistic? *Science Education*, *93*(3), 548–580.
- Nelson, T., & Slavit, D. (2008). Supported teacher collaborative inquiry. *Teacher Education Quarterly*, 35(1), 99–116.
- Pritchard, F. F., & Whitehead III, G. I. (2004). Serve and learn: Implementing and evaluating service-learning in middle and high schools. Mahwah, NJ: Lawrence Erlbaum Associates.
- Resnick, L. B. (1987). The 1987 presidential address: Learning in school and out. *Educational Researcher*, 16(9), 13–54.
- Roberts, P. (2002). *Kids taking action: Community service learning projects, K-8*. Greenfield, MA: Northeast Foundation for Children.

- Roker, D., & Eden, K. (2002). A longitudinal study of young people's involvement in social action. *Report to the Economic & Social Research Council*. Brighton, UK: Trust for the Study of Adolescence.
- Rotherham, A. J., & Willingham, D. (2009). 21st Century skills: The challenges ahead. *Educational Leadership*, 67(1),16-21.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement.

 Handbook of Motivation at School, 171–195.
- Schempp, P. G., & Graber, K. C. (1992). Teacher socialization from a dialectical perspective: Pretraining through induction. *Journal of Teaching in Physical Education*, 11(4), 329–348.
- Shockley, R., Watlington, E., & Felsher, R. (2013). Out on a limb: The efficacy of teacher induction in secondary schools. *NASSP Bulletin*, *97*(4), 350–377.
- Shor, I. (1999). What is critical literacy. *Journal for Pedagogy, Pluralism & Practice*, 4(1), 1–26.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714.
- Smith, T., & McEwin, K. (2011). *The legacy of middle school leaders: In their own words*. Charlotte, NC: Information Age Publishing.

- Storms, B. A., & Gordon, A. (2005). Inquiry as a strategy for leading school improvement. *Educational Leadership & Administration: Teaching & Program Development*, 17, 59–73.
- Stowell, L. P., McDaniel, J. E., & Rios, F. (1995). Fostering change for democratic middle schools through teacher education. *Middle School Journal*, 26(5), 3.
- Tabachnick, B. R., & Zeichner, K. M. (1984). The impact of the student Ttaching experience on the development of teacher perspectives. *Journal of Teacher Education*, *35*(6), 28–56.
- Theriot, S. (2009). *Research summary: Service-learning*. Retrieved from http://www.amle.org/Research/ResearchSummaries/ServiceLearning/tabid/1965/
- Totten, S., & Pedersen, J. E. (2009). *Social issues and service at the middle level*. Information Age Publishing.
- Unell, J. (2013). Overview of literature in social action. In *Scoping a quality framework* for youth social action (pp. 17-21). Retrieved from http://youngfoundation.org/publications/scoping-a-quality-framework-for-youth-social-action/
- Wang, M.T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal*, 47(3), 633–662.
- Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, *36*(1), 22–37.

- Wiles, J., & Bondi, J. (2001). *The new American middle school*. Columbus, OH: Merril Prentice Hall.
- The Young Foundation (2013). *Scoping a quality framework for youth social action*.

 Retrieved from http://youngfoundation.org/publications/scoping-a-quality-framework-for-youth-social-action/
- Zech, L. K., Gause-Vega, C. L., Bray, M. H., Secules, T., & Goldman, S. R. (2000).

 Content-based collaborative inquiry: A professional development model for sustaining educational reform. *Educational Psychologist*, *35*(3), 207–217.
- Zeichner, K. (2006). Reflections of a university-based teacher educator on the future of college-and university-based teacher education. *Journal of Teacher Education*, 57(3), 326–340.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89–99.
- Zeichner, K. (1985). Teacher socialization research and the practice of teacher training. *Education & Society*, 3/4(2/1), 25–37.
- Zeichner, K. (2009). Changing the epistemology of teacher education. *Teacher Education* & *Practice*, 22(4), 488–491.
- Zeichner, K., & Tabachnick, B. R. (1981a). Are the effects of university teacher education "washed out" by school experience? *Journal of Teacher Education*, 32(3), 7–11.
- Zeichner, K., & Tabachnick, B. R. (1981b). University teacher education: Its effect on teacher socialization. *Education Digest*, 47(3), 40–43.