

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

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Specialized middle level teacher education programs are an oft-purported lever for middle level education reform. Preparing teachers to enact “new” teaching practices that challenge the status quo in field placement schools presents a formidable challenge, however. This research investigated reform-oriented collaborative inquiry (ROCI), a framework developed by the author, as a pedagogy for facilitating reform-oriented student teaching. Qualitative methods were used to investigate the challenges and benefits experienced by the student teachers as they used ROCI to engage in reform-oriented student teaching. A case description is provided to illustrate how ROCI was used by 4 student teachers and 1 teacher educator to collaboratively develop a student-driven social action project aimed at engaging middle school students in “active, purpose learning” and “relevant curriculum.” Challenges included (a) a disconnect between university-based and school-based visions of teaching, and (b) cultivating student engagement in “new” teaching approaches. The benefits of participating in ROCI were (a) en-“courage”ment to remain reform oriented, and (b) increased confidence in and understanding of reform-oriented teaching. These findings point to the potential for ROCI to serve as a framework for building capacity in reform-oriented teaching, the importance of early opportunities to practice reform-oriented teaching, and the urgent need for political, structural, and financial support of school-university partnerships.

Three decades of calls for middle level education reform have resulted in a coherent vision often referred to as the “middle school concept” (Arth, Johnston, Lounsbury, Toepfer & Melton, 1985; Association for Middle Level Education [AMLE], 2010, 2012). While specialized middle level teacher education programs are an oft-purported lever for progress

toward this concept (AMLE, 2006), full implementation of the middle school concept nationwide remains a vision rather than a reality (McEwin & Greene, 2010). Middle level teacher educators are therefore tasked with preparing student teachers to enact this reform-oriented vision despite the fact that those reforms may not be in place in their field

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placements. At the same time, there exists an ethical responsibility to prepare student teachers for the pragmatic demands of the current field. In this way, the work of middle level teacher educators is positioned somewhere between *what is* and *what should be*. In light of perennial challenges in teacher education associated with teacher socialization (Allen, 2006; Zeichner & Tabachnick, 1981) and the theory to practice transfer (Zeichner, 2010), how can middle level teacher educators prepare student teachers to navigate the tension between the reform-oriented middle school vision and current realities of practice?

Recent research is beginning to reveal which elements of middle level teacher preparation programs are especially valuable to student teachers. The modeling of the middle level concept in teacher education courses, for example, has been offered as a means to illustrate reform-oriented practices (Kleine & McBryar, 2009). Yet questions remain as to how university classroom modeling transfers

into practice once students enter the field as student teachers. Surprisingly little has been written, however, about the student teaching experience of middle level teacher preparation and no empirical research exists that focuses explicitly on the challenge of reform-oriented student teaching at the middle level.

PURPOSE OF THIS STUDY

How, then, can middle level teacher educators prepare student teachers to enact this reform-oriented vision within the current context? At the heart of this study is a collaborative inquiry framework, reform-oriented collaborative inquiry (ROCI; Figure 1), designed to support middle level student teachers in engaging in reform-oriented student teaching. ROCI aims to create space for student teachers and teacher educators to work together to look at the spaces in between *what is* and *what should be* to envision and enact *what could be*.

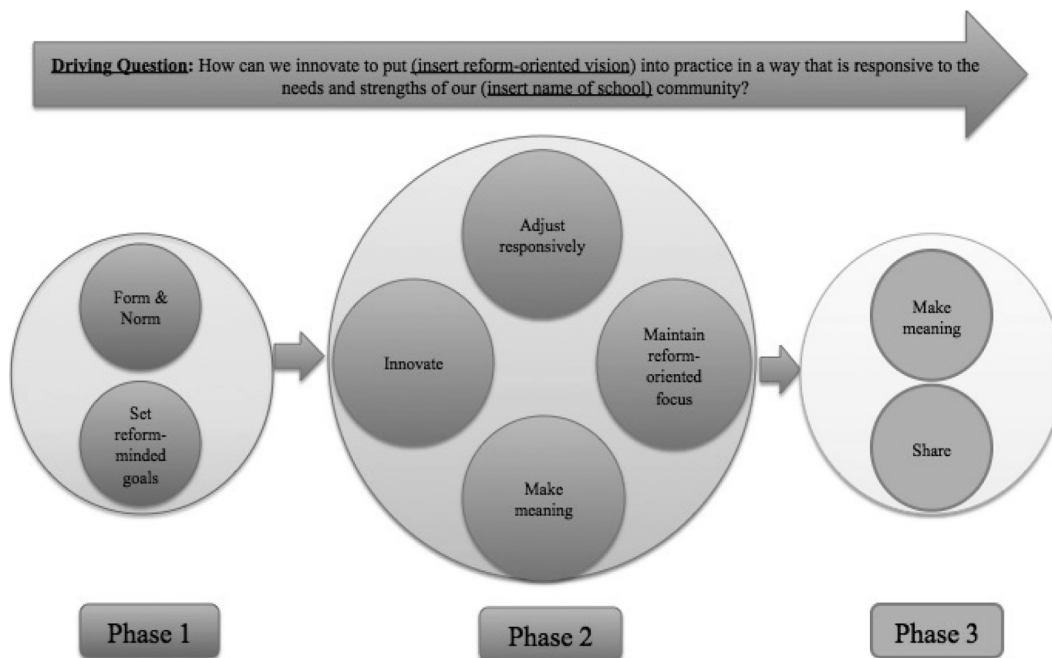


FIGURE 1
Reform-Oriented Collaborative Inquiry

The purpose of this study was to investigate the utility of ROCI as a pedagogy for the particular quandary of reform-oriented middle school student teaching. Two research questions guided the study:

1. What challenges did the student teachers encounter as they used ROCI to engage in reform-oriented student teaching?
2. In what ways did ROCI facilitate the goal of reform-oriented student teaching?

LITERATURE REVIEW

This study is informed by several approaches to teacher education that aim to rethink the intersection of theory and practice: hybrid spaces in teacher education, realistic teacher education, and collaborative inquiry.

Creating Hybrid Spaces in Teacher Education

Research underscores the importance of dynamic school-university partnerships in the work of teacher education (Boyle-Baise & McIntyre, 2008; Darling-Hammond, 2006). Nonetheless, Zeichner (2010) argued that “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.” Drawing on Bhabha (1990), Zeichner proposed that to address this disconnect, 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” (pp. 92–93). One example involves creating hybrid teacher educator positions, described 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. 94). While Zeichner sug-

gested that this work could create more dialectic third spaces in teacher education and reduce the disconnect between schools and universities, he did not offer any concrete guidance as to how this might be accomplished.

Realistic Teacher Education

The pedagogy of realistic teacher education and its use in the Utrecht University program, a Dutch teacher preparation program, has been extensively investigated by Korthagen (2011). The pedagogy is designed with the perennial problems associated with traditional teacher education in mind, particularly the transfer from theory to practice and the role that teacher socialization plays in perpetuating the status quo. Rather than operating from the prevailing assumption that theory should be taught and then applied later in practice, realistic teacher education engages preservice teachers in systematic and collaborative reflection that integrates theory and practice to make sense of “concrete practical problems and the concerns of student teachers in real contexts” (p. 38). As such, theory is not viewed as something to be learned and subsequently applied in practice but rather a resource to be used to makes sense of problems as they arise in real schools and classrooms. Evaluative research has revealed positive outcomes associated with realistic teacher education, including graduates’ overall satisfaction, perceptions of relevance, and perceptions of integration of theory and practice (Korthagen, 2011).

Collaborative Inquiry in Education Reform and Teacher Education

Bray, Lee, Smith, and Yorks (2000) defined 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) that is designed to “provide a liberating structure within institutional settings for people to explore questions normally closed to them” (p.

13). Research investigating the impact of collaborative inquiry on the work of in-service teachers has demonstrated several positive outcomes, including shifts in teaching practice as well as shifts in teacher thinking concerning their role in school change (Butler & Schnellert, 2012; Zech, Gause-Vega, Bray, Secules, & Goldman, 2000). As it concerns middle level education, Deering, Perez, Wong, Leong, and Yep (2003) have also demonstrated that collaborative inquiry can serve as an influential model for school-based professional development focused on middle level education reform. And lastly, with regards to reform-oriented student teaching, collaborative modes of inquiry have also been used to support student teachers in learning to “teach against the grain” (Cochran-Smith, 1991, 2001).

METHODOLOGY

Reform-Oriented Collaborative Inquiry

Drawing on these perspectives, I developed ROCI as a pedagogy for supporting reform-oriented student teaching in middle school. Several collaborative inquiry models have informed the development of ROCI, especially those developed by Bray et al. (2000), Nelson (2009), and Deering et al. (2003). ROCI is unique, however, in that it focuses explicitly on middle level teacher education and the collaboration of teacher educators and student teachers. The ROCI framework consists of three phases (Figure 1; Table 1), each of which is associated with a set of inquiry activities. While the three phases of ROCI are intended to be used chronologically (as indicated by the arrows), the inquiry activities within each phase may be employed in any order and are often simultaneous depending on the inquiry group’s determination.

Participant Selection

The four student teacher participants in this study had been students in my introductory

middle level education course that occurred the year prior to student teaching. Out of a group of 18 students, Bobbi, Danni, Charlie, and Ray¹ were selected on the basis that they (a) expressed a clear interest in middle level education reform as evidenced by class discussions and reflections, and (b) raised important questions concerning their impending student teaching experience in the context of middle level education reform. The four student teachers identified as White/Caucasian and ranged in age from 23–38 at the start of this work. Due to the sensitive nature of many of the critical views expressed by the student teachers in this study, each student teacher selected a gender-neutral pseudonym; I have minimized my use of gender-specific pronouns; and when necessary have opted to use feminine pronouns.

Context

The four student teachers in the collaborative inquiry group were concurrently enrolled in a relatively new 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 program’s first cohort.

Lakeview Middle School (LMS). All four participants completed their student teaching at the same field placement school, hereafter referred to by the pseudonym LMS. At the time of this study, LMS enrolled over 1,000 sixth-, seventh-, and eighth-grade students in a large suburban mid-Atlantic public school district. Of the students enrolled at LMS, approximately half identified as Black/African American, one third Hispanic/Latino, and the remainder White, Asian, and two or more races. Over two thirds of students were eligible for free or reduced lunch.²

Mentor Teachers and Classroom Assignments. At the time of this study, LMS was a relatively new professional development school. Although we had hoped mentor teachers would also participate in the collaborative inquiry with the student teachers, the limited

TABLE 1
Phases of ROCI and Associated Activities

Phase	Collaboration Activities	Examples
1	Form and norm	- Initiate collaborative inquiry group; - 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; - Identify available school resources and group interests; - Consider doability; - Identify a reform-oriented and responsive focus based on all of the above
2	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;
	Adjust responsively	- Meet to discuss progress and trouble-shoot; - Communicate with key stakeholders and solicit feedback; - Make responsive adjustments as needed;
	Maintain a reform-oriented focus	- Remind group members and colleagues of reform-oriented goals; - Ensure that work remains 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.

time and financial resources at LMS in addition to the adoption of a new Common Core curriculum made the participation of mentor teachers in this work unmanageable. Instead, the prospective participants in this research were placed with mentor teachers who were identified by the professional development school site coordinator as being open to innovation and inquiry.

The Case Description: ROCI in Practice

Phase 1. During the first phase, our inquiry group met twice in November to estab-

lish norms, reflect on early field experiences, and develop a reform-oriented focus. We reflected on the group's perceptions of the extent to which AMLE's 16 characteristics (2010) were evident in their field placement classrooms at LMS. The student teachers identified some examples of teaching aligned with the following two characteristics: (1) "educators use multiple learning and teaching approaches," and (2) "varied and ongoing assessments advance learning as well as measure it" (p. 14) The consensus among the student teachers, however, was that there was little evidence of the other characteristics

emphasized in their coursework. We then explored ideas for possible reform-oriented innovations they might develop and enact after the winter break. The group was especially passionate about creating “relevant curriculum” by developing a “hands-joined” (AMLE, 2012, p. 16) learning experience, one in which teachers and students work together to develop learning projects. Ultimately, the group decided to codevelop a student-driven social action project with each of their homeroom classes.

Phase 2. The second phase was the longest, stretching from December to May. We met twelve times, approximately twice per month. To inform the focus of the social action project, the student teachers asked their students which issues were of concern to them in the world, their community, and their school. A predominant theme in student responses was a desire to make their school feel more positive and less punitive. Our collaborative inquiry group thus launched a social action project driven by the essential question, “How can we promote a positive school culture at LMS?” The resulting project was designed to experiment with the following AMLE characteristics: (1) active, purposeful learning (specifically hands-joined learning), (2) relevant curriculum, and (3) the “school environment is inviting, safe, inclusive, and supportive of all” (AMLE, 2010, p. 14).

Throughout the duration of the project, the student teachers provided multiple opportunities for student choice (e.g., supporting students in collaborating with others to propose initiatives of their choice and enact those that were approved) and voice (e.g., providing students with a platform to share their ideas with school leadership throughout the project). Due to the nature of the project focus, the student teachers acted as liaisons between the middle school students and school leadership, sharing ideas and feedback with both parties concerning possible initiatives. This role proved to be difficult to navigate as the student teachers found themselves entrenched in school politics that resulted in mixed signals, confusion, and

occasionally tense interactions. The school principal had the final word, for example, in identifying which initiatives could be explored further. In this way, while the social action project was student-driven, it was also limited by the norms of power and authority in this particular school. Also, as a result of mentor and student teacher concerns regarding the multiple demands placed on instructional time, our project work took place twice a week in homeroom instead of during core instructional time. This had serious implications for the project since this meant that the project was ungraded and also relegated to a time of day that was often unstructured and thus perceived by students as “free time.”

Ultimately, three of the ideas developed by the middle school students and student teachers came to fruition: (1) a schoolwide Spirit Week, (2) a Teacher Appreciation Week, and (3) the proposal of a student leadership club called S.O.U.L. (Society of United Leaders). To evaluate the extent to which the project was successful in experimenting with the select reform-oriented characteristics, middle school students provided feedback via a final reflection on various aspects of the project, including “student voice,” “relevance,” and their perception of the impact on their school culture.

Phase 3. The final ROCI phase began in mid-May and coincided with the official end of student teaching. At this point, the group turned their attention to determining to what extent they felt the innovation was successful and reflecting upon the challenges, benefits, and insights learned through their collaborative inquiry experience as a whole. All four student teachers reviewed their students’ feedback and in our last inquiry group meeting, student teachers shared their reflections as well as themes and surprises in the feedback of their students. The group shared their work with a new cohort of students enrolled in my middle level education class. Our group also developed a proposal, eventually accepted, to share our work at the AMLE Annual Conference.

Role of the Researcher

Since in addition to being the researcher, I was one of the collaborative inquiry group members, my role in this research was that of a participant observer. As the only teacher educator in our group, my role was unique in several ways. Unlike the student teachers, I was not responsible for facilitating the student-driven social action project in the middle school classroom. Instead, I primarily facilitated our meetings, identified professional resources as needed, and offered guidance and feedback as the group developed ideas. As the researcher, I also structured the collection and analysis of data throughout our work.

Data Sources and Analysis

The data sources for this study included (a) inquiry group audiotapes and memos, (b) group-created teaching materials associated with the student-driven social-action project, (c) student teacher observation memos from two classroom observations per student teacher, (d) researcher memos, (e) transcripts from student teacher interviews conducted pre- and post-ROCI (Table 2), and (f) student

teacher reflections on challenges and benefits they were experiencing.

Data analysis was guided by the proposition by Miles, Huberman, and Saldaña (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 deductively coding the relevant data sources using the categories of “benefits” and “challenges,” after which coded units of data across data sources were arranged in a data display to facilitate conclusion drawing concerning themes. After these stages of analysis, I returned 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).

CHALLENGES

A Disconnect Between College of Education and LMS Visions of Teaching

Although our middle level teacher preparation program emphasized the AMLE reform-oriented vision for middle schools, the student

TABLE 2
Student Teacher Interview Questions

<i>Sequence</i>	<i>Interview Questions</i>
Pre-ROCI interview	1. Consider the middle school concept. To what extent is it in place at your field placement? (Start general then point out individual characteristics.) Why do you think this is? 2. How prepared do you feel to implement the characteristics associated with the middle school concept? Explain. Which do you feel most prepared for? Least?
Post-ROCI interview	1. Consider the middle school concept. To what extent is it in place at your field placement? (Start general then point out individual characteristics.) Why do you think this is? 2. How prepared do you feel to implement the characteristics associated with the middle school concept? Explain. Which do you feel most prepared for? Least? 3. Let us discuss the reflection you prepared. a. Tell me about the challenges you faced as we engaged in ROCI. b. What strategies, if at all, did you use to cope with these challenges? c. Tell me about the benefits, if any, you experienced as we engaged in ROCI. d. 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?

teachers in this study reported seeing very little evidence of the AMLE characteristics in their field placement classrooms. The middle school concept as defined by AMLE (2010) had not been a professional development emphasis at LMS, which likely explains part of this disconnect. Nonetheless, from the perspective of the student teachers, this perceived disconnect posed a significant challenge as they strove to engage in reform-oriented student teaching. Although the student teachers were able to identify some examples associated with the characteristics of “varied and ongoing assessment” and “multiple teaching and learning approaches,” all four student teachers reported fundamental gaps across all of the curriculum and instruction characteristics. Charlie explained,

(The curriculum is) 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 concerned by the ways in which they felt that LMS was lacking in AMLE's “school environment” characteristic, which states “the school environment is inviting, safe, inclusive, and supportive of all.” The following two excerpts from interviews illustrate this 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.... 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 ... they're a fortress school. And in terms of the AMLE concept there, it's just—sigh. (Bobbi)

The student teachers also frequently spent a portion of our inquiry group meetings (unprompted) sharing developmentally inappropriate practices they had witnessed at LMS. The vast majority of these involved teacher-student interactions in which a faculty member raised their voice in a manner that the student teachers felt was inappropriate or threatening to the student.

As they implemented the social action project, the student teachers' interactions with school faculty also revealed that some teachers were either unaware of or confused by some of the AMLE characteristics emphasized in our teacher education program. This was especially true regarding the concept of hands-joined learning. In her post-ROCI interview, Ray offered this example of a faculty member who would occasionally join her homeroom and interject in student discussions for extended periods of time:

In a lot of the things that we did ... 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.

Similarly, as she worked with the students and school leadership to plan Spirit Week, Danni noticed that faculty members 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 were frustrating since they placed student teachers in the predicament of either having to disagree politely with a more experienced faculty member or compromise principles they had become passionate about. This challenge was exacerbated by their

novice status in the building since they were understandably wary of being viewed as hypercritical. The student teachers were thus continually aware that our student-driven social action project, although rooted in research and best practices literature, was not in step with the school's status quo. This tension in turn contributed to a general perception by the student teachers that the school was resistant to "new" teaching approaches espoused in the College of Education, especially those that involved sharing power with students. In their postinterviews, 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. For example, in response to the prompt, "What challenges did you face throughout ROCI?," Danni stated, "The school being resistant to innovative ideas and new practices." Since this study did not investigate the perspectives of the school leadership, it is worth noting that this was the student teachers' perception. Nonetheless, this was a central challenge in the experiences of the student teachers.

Cultivating Student Engagement in "New" Teaching Approaches

As novices to teaching, the student teachers faced an expected learning curve associated with enacting their student-centered vision. Enacting the social action project revealed the unique pedagogic skills required of teachers who take on the challenge of hands-joined learning. Classroom observations and inquiry group meeting discussions also made it clear that the student teachers held some naïve conceptions in regards to student-centered instruction. Finding the role of the teacher in "hands-joined learning" proved especially difficult at first. The student teachers 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 charac-

teristics about which they were so passionate thus revealed a tendency toward idealist or extremist thinking regarding what these characteristics should look like in practice. This thinking was problematized, however, when the student teachers attempted to bring these ideals to life in their classroom with real kids.

In one inquiry group meeting during the investigation phase of the project, two student teachers expressed frustration because the students were having difficulty researching "positive school culture" online. Bobbi shared that she felt this was because "they don't know how." Upon further discussion, it became apparent that the student teachers had simply instructed the students to do research online but had not directed students to specific search criteria or web resources. Similarly, in a brainstorming session with 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. And in another inquiry group meeting, reflecting on the preparations for Teacher Appreciation Week, Ray shared that she had "attempted to let the students manage the tasks but it's not going so well." These examples reveal a tendency for student teachers to overlook the role of teacher guidance and scaffolding in student-centered instruction, which suggests that the student teachers were underprepared to facilitate student-centered learning environments.

Similarly, many of the middle school students were unfamiliar with "new" instructional approaches associated with hands-joined learning. This 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 echoed these concerns by stating that the students are "not used to making decisions" and "I think they really enjoy having choices but they ask a lot of questions and they don't really know how to get started." In addition to revealing that middle school students don't always take to student-centered learning experiences as enthusiastically as teachers hope they will, these examples also reveal that the student teachers had assumed that they would.

BENEFITS

En-"courage"ment to Remain Reform-Oriented

Etymologically, to encourage can be understood as "to make strong, hearten" (Harper, 2014). In keeping with this sense of the word, participation in ROCI seemed to give the group the courage necessary to be bold and resolute despite many challenges. For example, in the most frustrating parts of Phase 2, I frequently offered the student teachers the option to scale back or simply stop the project. The group was uninterested in this possibility, resolute in their desire to see it through, and instead became increasingly bold in their advocacy as the project progressed. Reflecting after one such group meeting, I wrote the following in my researcher memo:

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.

Similarly, the student teachers reported that they were comforted by our meetings and by my support specifically, which helped them persist. During Phase 2, when the student teachers found themselves acting as a liaison between students and school leadership, Danni openly expressed her gratitude for my support in navigating this tension. Likewise, during an inquiry group meeting in which the group had been discussing the challenges they were facing in advocating for student ideas, Ray reflected that in light of all of the challenges, "If I didn't have you, I would not be doing this."

Frequently, ROCI seemed to offer much-needed comfort to group members. As the group faced challenges through each phase, our ROCI meetings and 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. In inquiry group meetings, as the student teachers shared their challenges, they would also routinely offer affirmation (e.g., "That sounds horrible," "Yeah, that happened to me too"), compassion (e.g., "That was so wrong," "How can we help you?"), and hope ("Even though it's not perfect, these kids are doing amazing work!" "Listen to what this kid came up with!"). Although there was sometimes no immediate solution to challenges, the student teachers seemed to benefit nonetheless from an opportunity to talk through what they were experiencing. For example, while reflecting on a tense interaction she experienced with another teacher concerning the social action project, 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."

At times, our inquiry group meetings also prevented the group from losing sight of the

reform-oriented vision that undergirded this work. When faced with multiple challenges that limited our time and increased the pressure, the temptation would occasionally arise to make decisions without the input of students. In one inquiry group meeting in Phase 2, for example, two of the student teachers enthusiastically proposed the idea of having the middle school students create “pep talks” similar to those created by Kid President (Montague, 2013) as a legacy for future classes. When they proposed that this should be the culminating activity for all students involved in the project, I reminded the group of their commitment to incorporating meaningful student choice and voice in their project. In response, Charlie (who had been silent up until that point) expressed her misgivings that the pep talk idea would interest her students. Her 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. Ultimately, this discussion resulted in the group deciding to ask their students how they would like to share what they had learned. In this way, participation in ROCI served as a reminder of reform-oriented commitments while student teachers were navigating the competing demands of the field.

Increased Understanding and Confidence in Reform-Oriented Teaching

While participating in ROCI, the student teachers developed confidence as well as pedagogical knowledge regarding reform-oriented practices. Specifically, the student teachers developed a deeper understanding of how to cultivate student engagement in “hands-joined” and active, purposeful learning.

As previously described, the student teachers faced several challenges in cultivating student engagement throughout their social action project. To navigate this challenge, the student teachers experimented with a variety of approaches. Charlie, for example, found it was

helpful to support students in making strategic choices, reporting the following:

I encouraged them to gear their research toward things that they were interested in themselves helped a lot.... It made it more relevant to them. In general, I tried to allow for choices as much as possible.

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.... Cassie [one of her students] was amazing with the fact that she followed everything exactly how I would love every student 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.

Bobbi provided the following illustration of the approach she developed to establishing the teacher’s role in facilitating hands-joined learning:

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.

In addition, Bobbi reported a new appreciation for the delicate balance between offering students the support they need while also allowing them to struggle when needed. She

shared that early on she realized that “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 as the project progressed, she reported the following realization:

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.

Each of these examples demonstrates how the student teachers, through participation in ROCI, experimented with various methods for cultivating student engagement in hands-joined learning.

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, reported 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.... Yeah I just, I feel a lot more comfortable with this. I have a lot better idea of how to incorporate student choice.

Interestingly, in her preinterview, 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 postinter-

view, however, Charlie shared the following reflection:

I think before my thinking was that everything had to be spur of the moment.... 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 there’s flexibility within your planning.

This articulation of specific teacher moves associated with active, purposeful learning (e.g., providing choices, flexible planning) demonstrate considerable growth since this nuanced understanding of the characteristics was not evident in her preinterviews.

Likewise, in her preinterview, 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 shared concerns that the curriculum would 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 feel like I have the knowledge to be ready to jump in as soon as I get my bearings ... 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 8½.

Ray also reported a similar increased confidence in the characteristics she felt she could influence, 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).”

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 that 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 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)

IMPLICATIONS

The findings of this study point to several implications for specialized middle level teacher education programs that aim to support reform-oriented student teaching, three of which are discussed below.

ROCI as a Framework for Building Capacity in Reform-Oriented Teaching

Despite the numerous challenges the student teachers faced, they were able to develop and implement a reform-oriented innovation. This suggests that ROCI is a framework that supports participants in persisting in reform-oriented innovation even in challenging circumstances. In middle level teacher education programs, ROCI could thus be an effective pedagogy for supporting reform-oriented student teaching by minimizing the impact of teacher socialization on student teachers. Future studies that investigate the use of ROCI with a cohort of mentor and student teacher dyads would be especially useful as this would address the limitations associated with small sample size, uniformity of commitment to middle level reform, and the absence of mentor teacher participation.

Early Opportunities to Practice Reform-Oriented Teaching

The findings of this study elucidate the significant challenge of enactment, particu-

larly as it concerns student-centered teaching approaches. As the student teachers in this study attempted 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. Having these practices modeled, discussed and simulated at length in their teacher education courses was not adequate in preparing them for reform-oriented teaching in their field placement school. This suggests that student teachers could benefit from earlier opportunities to facilitate student-centered learning environments for middle school students. Scaffolded opportunities to take on the teacher's role in such learning experiences in field placements *before* student teaching and under the supervision of a teacher educator could prove especially powerful. Such opportunities would allow for an authentic context in which teacher educators could address frequent naïve conceptions held by student teachers concerning the role of the teacher in student-centered learning. Likewise, these opportunities would also allow student teachers to develop an earlier understanding of the common challenges their middle school students may face when engaging with these "new" approaches to learning.

This implication resonates with recent calls for innovative approaches to teacher education that mutually support practice-based teacher education as well as teaching and learning in partnership schools (McDonald, Kazemi, & Kavanagh, 2013). Design settings in which preservice teachers experiment with "high-leverage practices" (Ball & Forzani, 2009) associated with the reform-oriented middle school vision alongside mentor teachers could deepen everyone's understanding of reform-oriented practices. Additionally, in building capacity in this way, preservice teachers would now be able to observe examples of reform-oriented teaching in partnership schools, thus minimizing the gap that exists between the middle school vision and current realities.

Political, Structural, and Financial Support of School-University Partnerships

This research underscores the urgent need for systemic structural, financial, and political changes in teacher education to facilitate and incentivize school-university partnership work. Even the most reform-oriented student teachers included in this study faced great challenges associated with navigating the disconnect between college of education and field placement visions of teaching and learning. This suggests 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. 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; Darling-Hammond, 2006; Zeichner, 2010). Yet 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 (Lyll & Sell, 2006), teacher education programs that aspire to develop dynamic school-university partnerships grapple with questions such as *Who will do this work? And How will they be compensated?* 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 lever for middle level education reform, their capacity to build the dynamic school-university partnerships required for such work is greatly limited. To make such systemic changes, 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. 95). Cross-institutional inquiry into the conditions that are supportive of dynamic partnership work would greatly add to the knowledge base around school-university partnerships.

In conclusion, reform-oriented student teaching in middle school is a complex act that calls upon novice teachers to challenge the status quo in their field placement schools. By illuminating the numerous challenges faced by student teachers, this study demonstrates the critical importance of pedagogies such as ROCI to the field of middle level education and the future of its reform efforts. Although ROCI did facilitate reform-oriented student teaching, this study also underscores the urgent need for institutional level changes that would promote, rather than hinder, the essential work of school-university partnerships.

NOTES

1. All names used in this manuscript are pseudonyms
2. To protect anonymity, figures have been rounded.

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