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EMBODIED KNOWING IN TEACHER EDUCATION: FACTORS THAT LEAD TO TEACHER AGENCY

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ABSTRACT

The purpose of this paper is to develop an initial theory explaining why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot. Using a qualitative study design framed by notions of intimate scholarship and data analysis rooted in the traditions of grounded theory, I provided a series of three professional development sessions for elementary school teachers at a private school, four of whom engaged in additional interviews with me deconstructing their beliefs about a specific instructional technique, using discussion based teaching strategies, and three of whom participated in three observation/interview cycles during which they attempted to implement the strategy presented during the professional development session. Data was collected through indepth interviews, classroom observations, and analytic memos, then analyzed using a grounded theory approach. During analysis of the data, four factors that directly relate to the research question emerged, including preparation, commitment, relationship, and agency. These are described in detail, and explanations and excerpts from the data are used to illustrate the factors holistically as well as detailing more nuanced aspects of each factor. These categories contribute to previous research on professional development in teacher education at large and in the more specific field of social studies professional development by offering a framework, Embodied Knowing in Teacher Education, that builds on existing theories of the ways teachers learn. Implications of these findings for teacher educators, school leaders and administrators, and instructional coaches as well as independent consultants or curriculum publishers developing professional development programs are also examined.

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PROLOGUE

It is funny how the teacher you think you will be is not always the teacher you become. When I was a student teacher in a fifth-grade classroom, I frustrated my supervising teacher regularly. I wanted to do things differently. I wanted to try the things I learned in my education program. I wanted to try things I thought might work. I wanted to break away from the traditional mold. She wanted me to follow the plan so she would not be too far behind when I left at the end of the fall semester.

The fall that I did my student teaching was an election year. I saw this as a perfect opportunity to break away from the pattern that was social studies education in Mrs. Gonzalez's¹ class: read the chapter, answer the questions at the end of the chapter, take a test. When it was my turn to take over all the teaching for two full weeks, I planned a unit about elections. Instead of using a textbook, I had each student choose a storybook character and run for president as that character. We had primaries, chose campaign managers, and (I like to think) for two glorious weeks, we had a lovely time doing social studies in a memorable way, rather than reading a book and memorizing "important" dates. Is it the same way I would teach during an election year now, 16 years later? Probably not. But the underlying principle, my motivation, is still the same. Even though I may not have been able to articulate it at that moment, I could see what research proves. Students learn better in an environment where they are active and engaged, rather than passively receiving information (Barton, 1995). Unfortunately, I do not think that is something Mrs. Gonzalez learned. At the conclusion of our election unit, she resumed control of social studies, returned to the textbook, and made her frustration that we were now two weeks behind the other classes extremely clear.

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¹ All names have been changed to pseudonyms.

Recently, I found a scrapbook, made for me by Mrs. Gonzalez's class. As I looked through the pages, each made by an individual student, I remembered the lessons we did throughout that semester. I remembered how, despite considerable pushback, I took time to plan and enact hands-on lessons. In the scrapbook, one student wrote "I like you because you do different stuff." Another said, "The reasons I like you are... you are not like other teachers (that's a good thing)."

It is funny how the teacher you think you will be is not always the teacher you become. Research shows that teachers transition quickly from idealistic behaviors to more custodial ones (Korthagen, 2010). I have often wondered if that is the case for me, but as I looked through my scrapbook and thought through my most recent classroom teaching experiences, I felt that I was indeed the teacher I have always wanted to be. And that makes me wonder: Why? Why are some teachers able to learn good technique and good theory and implement it, and others choose not to? Why do some teachers witness instruction that engages students but continue to teach more traditionally? Why do some teachers learn new instructional strategies but choose not to engage in them?

I have found this to be the case in many areas, but especially with the field of classroom discussion. As I have begun to use discussion strategies with my students and seen the level at which they are able to engage, I cannot imagine why so many teachers continue to read lessons from the social studies textbook and answer the questions at the end of the chapter. When I talk to other teachers about instructional strategies, I often hear something like "Wow, that is great. I would love to do that, but I cannot teach that way." In my research, I investigate ways teachers can use classroom discussion techniques with younger students in a way that prepares them for their future educational experiences and their future lives as citizens. But more than that, I investigate the ways that a teacher's experiences, alongside their identity, agency, and efficacy,

play a role in the transition from idealistic behaviors to custodial ones. I hope this study helps teacher educators gain insight into how and why teachers choose to implement some instructional strategies but not others and prompts thinking about how to better equip preservice and inservice teachers for the good of their students.

CHAPTER 1

INTRODUCTION

Researchers find distinct learning differences between classrooms where students passively receive information versus classrooms where students have an active, participatory role (Barton, 1995), and learning how to engage in critical dialogue about diverse beliefs is vital for a functioning democracy (Mitra et al., 2017). However, though multiple studies indicate the necessity of including discussion or dialogue in elementary classrooms (Hess, 2004; Klinzing & Rupp, 2008), research shows that students are more likely to engage in recitation disguised as discussion than actual collaborative and generative dialogue (Larson, 1996; Parker & Hess, 2001).

Just like elementary school provides the foundation for literacy and math skills, it should also lay the foundation for the skills students need to be successful in social studies (Libresco, 2018) and as future citizens throughout their life (Mitra et al., 2017). These skills include the ability to synthesize diverse thoughts and express their opinions (Swalwell, 2015). Additionally, while there are some questions about when it is appropriate to engage in meaningful discussions with young students, the National Council for the Social Studies asks teachers to plan activities designed to cultivate young students' abilities to form and voice opinions (2019). Indeed, research shows that children can deal successfully with ideas that are developmentally appropriate and highly scaffolded (Hess, 2009). In *You Can't Say You Can't Play*, Paley (1992) provides a tangible example of the ways elementary students are able to grapple with complex ideas and participate in thoughtful, age-appropriate discussions. However, if students have not been introduced to the strategies used in effective discussion from a young age, it is unrealistic and unfair to expect them to know how to engage during middle and high school. And since

discussion is necessary, both for the developing future citizens as well as the pedagogical aim of creating communities of inquiry (Parker & Hess, 2001), it is a mistake for schools to wait until students are in secondary school to begin to include discussion-based teaching strategies.

However, merely suggesting that elementary school teachers engage in discussion-based strategies is not enough. Conducting an effective discussion is a difficult feat even for the most seasoned educator and teaching preservice teachers how to lead them is even more challenging (Parker & Hess, 2001). Libresco (2018) suggests:

If society decides that making time for thoughtful, caring discussions, where students and teachers feel comfortable and respected enough to express their honest opinions on controversial issues, should be a core competency of elementary teachers, then it needs to find less threatening ways for teachers to facilitate such discussions (p. 285).

Indeed, many teachers who feel unprepared for or fearful of engaging in classroom discussions ignore student questions and controversial topics or gloss over them superficially, but creating a classroom environment where student talk and discussion is valued is essential to the broader aims of democracy and to citizen development (Engebretson, 2018). The absence of meaningful discussions that lead to critical dialogue is problematic because "children and adolescents who are denied the experience of grappling with these complex social controversies grow up developing intercultural misunderstandings that often lead to discrimination and bias" (Bersh, 2013, p. 47).

While Shear et al. (2018) find that little research takes place about discussion in elementary schools, in part because "at the elementary level, critical conversations are simply not taking place" (p. xvii), this is not entirely true. As mentioned above, research shows that young students have the ability to engage in classroom discussion and critical dialogue (Hess, 2009;

Paley, 1992), and in elementary classrooms with thoughtful and well-equipped teachers, these conversations are taking place (Allen, 2018; Bickford, 2021; McGriff & Clemons, 2019; Mitra et al., 2017; Payne & Green, 2018; Serriere, 2010; Serriere et al., 2017). However, based on the available research in this area, calculated classroom discussion that leads to critical dialogue seems to be the exception, not the norm. This deficiency may be a result of two key factors, the first being a decrease in the instructional time devoted to the subject where these discussions would easily fit, social studies (Fitchett & Heafner, 2010). As teachers are pressured to focus their attention on tested subjects such as reading and math, social studies has been put on the back burner (Houser et al., 1995; Lintner, 2006). Second, research shows teachers have a tendency to teach as we have been taught, even after being introduced to more effective instructional strategies (Lortie, 1975; Parker & Hess, 2001). More research should be done on the effects of implementing discussion-based teaching techniques in the elementary school and how teachers can be equipped to facilitate these discussions effectively.

Research Purpose and Questions

While a fairly significant amount of research has been done about the effectiveness of utilizing discussion strategies in social studies in secondary grades, relatively little has been done about the same phenomenon in elementary grades (Hess, 2004). Additionally, research shows a relatively small number of teachers feel equipped to facilitate discussions, especially about multicultural or controversial topics (Bersh, 2013; City, 2014; Lazar & Offenberg, 2011), even after receiving direct instruction in how to teach with discussion (Parker & Hess, 2001).

In response to these ideas, this qualitative study will investigate why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot. To answer this larger question, this study will consider three supporting questions:

- 1. How do elementary teachers describe and explain their personal experiences with classroom discussion?
- 2. In what ways do elementary teachers respond to professional development about classroom discussion strategies?
- 3. After receiving instruction in specific pedagogical strategies, how do elementary teachers facilitate discussion and/or utilize discussion to facilitate critical dialogue?

First, it will explore how teachers describe and explain personal experiences with classroom discussion. Though teachers may have had teacher education courses that trained them to conduct discussion in a different way, Lortie's (1975) theory of the apprenticeship of observation suggests that spending at least 16 years observing and participating in the traditional initiate-respond-evaluate (IRE) model of discussion is difficult to overcome (in Parker & Hess, 2001). These lived experiences influence teachers and their ability to conduct or participate in classroom discussions or critical dialogue.

Second, this study will consider how teachers respond to professional development about particular pedagogical strategies. Research suggests teacher education has a disappointing impact on teacher behavior (Grossman, 2008; Hawkman et al., 2015; Korthagen, 2010). If a teacher's personal experiences lead to using their own education as a model for how they facilitate discussion, how will they react to professional development in classroom discussion techniques?

Finally, this study will observe how teachers facilitate discussion after receiving specific pedagogical training. There is a need to identify effective discussion techniques that can be scaffolded across elementary and secondary grade levels to provide students with the appropriate

skills necessary to engage in classroom conversations (Libresco, 2018) and critical dialogue (Mitra et al., 2017).

Using data drawn from investigating these three supporting questions, I will return to the big picture and consider the primary research question: Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot? This study has the potential to contribute to our understanding of how teachers learn and how we, as teacher educators, can develop learning experiences that impact classroom practice.

CHAPTER 2

LITERATURE REVIEW

Classroom discussion has the power to expand your mind and build community (Parker & Hess, 2001). Its presence in a classroom helps students learn to play with ideas and develop critical thinking skills; its absence indicates an environment where knowledge lives solely within the teacher (Hess, 2004). Research shows distinct learning differences between classrooms where students passively acquire information versus classrooms where students actively participate (Barton, 1995). Discussion-based pedagogy is crucial to a classroom environment where students are required to think rather than simply regurgitate information (Hess, 2004), and learning to talk about beliefs in a way that students hear and learn from one another is an increasingly important skill in diverse democracy (Mitra et al., 2017).

Unfortunately, within U.S. schools, we find a weak classroom practice of discussion (Parker, 2006a) as discussion-based strategies are seldom expected or taught (Hess, 2004; Klinzing & Rupp, 2008). Too often teachers feel the need to focus their instructional time on subjects that are included in standardized tests (Fitchett & Heafner, 2010), allocating less and less time for the subject where discussion would be the most helpful: social studies (Houser, 1995; Lintner, 2006). Just as elementary school provides the foundation for literacy and math skills, it should also lay the foundation for the skills needed to be successful in social studies (Libresco, 2018) and as future citizens (Mitra et al., 2017). These skills include the ability to synthesize diverse thoughts and express opinions. "When teachers notice how unfamiliar students are with discussing their own thoughts and opinions, it becomes clear how important it is to lay the groundwork... to help students feel comfortable expressing their ideas" (Swalwell, 2015, p. 152).

While a fairly significant amount of research exists concerning the utilization discussion based pedagogy in social studies in secondary grades, relatively little exists concerning the same phenomenon in elementary grades (Hess, 2004). Research shows that children can comprehend ideas that are developmentally appropriate and scaffolded (Bickford, 2021; Hess, 2009; Serriere et al., 2017). Yet if students have not been introduced to the strategies used in effective discussion from a young age, it is unrealistic to expect them to know how to engage during middle and high school, and further, to engage in dialogue as future citizens (Mitra et al., 2017). It is unfair for schools to wait until students are older to introduce these discussion based pedagogies. More research should be done on the results of implementing discussion-based teaching techniques in elementary school social studies.

Additionally, while many discussion based strategies exist and find successful implementation in secondary classrooms, research shows that, even when introduced to effective discussion based strategies, teachers fall back on their own educational experiences as the primary model for their instruction (Parker & Hess, 2001). This is hardly surprising, since little research exists that models or provides explicit examples of strategies used by social studies teachers to discuss complex topics (Demoiny, 2017), nor do preservice teachers witness effective social studies instruction during their field experiences (Hawkman et al., 2015).

With these broad ideas in mind, Chapter Two has six aims. First, it defines a set of key terms: authentic discussion, critical dialogue, and social studies, and explores current research surrounding discussion based pedagogy in elementary classrooms as it relates to social studies. Second, the chapter considers whether young children are ready to engage in critical dialogue and provides references that suggest they are. Third, this chapter provides more detail about leading classroom discussions, including descriptions of effective discussion based learning, and

considers why classroom discussions fail. Fourth, it catalogs examples of teachers successfully engaging in critical dialogue with elementary students and considers how administrators and teacher educators can support teachers as they attempt to facilitate discussion that leads to critical dialogue with young students. Fifth, this chapter provides a brief look at the current state of professional development in the field of social studies as one way to support teachers is by providing effective professional development. Finally, the chapter concludes by introducing the theoretical framework for the study, which centers around the ideas of constructing personal knowledge and outlines how these theories are not only relevant but will also inform ideas about equipping teachers to utilize discussion-based strategies.

Authentic Discussion and Critical Dialogue in Social Studies

What is Social Studies?

The National Council for the Social Studies (NCSS) defines social studies as the integrated study of the social sciences and humanities to promote civic competence (NCSS, 1994). Educators generally agree that the content covered within the field includes the study of history, geography, economics, and civics. Parker and Beck (2016) build on this idea and emphasize the importance of the field, suggesting:

Without historical understanding, there can be no wisdom; without geographical understanding, no cultural or environmental intelligence. Without economic understanding, there can be no sane use of resources and no rational approach to decision making, and, therefore, no future. And without civic understanding, there can be no democratic citizens and, therefore, no democracy (p. 2).

As our world grows more and more complex, it is crucial that a critical mass of Americans understand history, current affairs, and politics (Leming et al., 2006), and the bulk of this responsibility falls to our schools. Social studies is essential for promoting and understanding the

goals involved in creating and maintaining democracy, and elementary social studies lays the foundation for achieving these goals as "the elementary classroom is ... where students develop some of their initial attitudes about, and knowledge of, history and the social sciences" (Leming et al., 2006, para. 2). NCSS supports this idea: "If the young learners of this nation are to become effective participants in a democratic society, then social studies must be an essential part of the curriculum throughout the elementary years" (NCSS, 2017, para. 3). This chapter argues that one key way to teach social studies content areas and begin to build the knowledge base necessary for participating in a democratic society is the inclusion of authentic discussion and critical dialogue in the elementary classroom.

What is Authentic Discussion?

Discussion is a form of group inquiry that allows for a purposeful exchange, a dialogue, a sharing of views, thoughts, and ideas (Parker, 2001). Within a discussion, participants may exchange information, engage in mutual critique, address a question of common concern, consider diverse views, or come to a decision. Participants may be playful or serious (Hess, 2004). Some discussions follow specific procedures, and others are less structured (Lewis, 2017). Not every discussion encompasses all of these ideas, but there are a few commonalities in all discussions that help us decide what qualifies as a discussion and what does not. First, a discussion must be a dialogue, although the number of participants can vary greatly. Second, it is a distinct approach to building knowledge (Hess, 2004). Beyond that, it can take many forms, such as a seminar or a deliberation, and it can be used for multiple purposes (Parker, 2001).

Moving beyond these formal definitions, for a discussion to be authentic, there must be a real exchange of ideas and information. Possibly the best way to explain an authentic discussion is to explain what it is not. It is not simply recitation — "the IRE pattern of teacher—student

interaction wherein the teacher initiates talk with a question, a student responds, and the teacher evaluates the response for adequacy" (Parker & Hess, 2001). In an authentic discussion, students are not trying to find the answer the teacher is looking for; instead, they are exploring ideas and conducting inquiry with a group of fellow learners also engaged in a journey for the truth.

What is Critical Dialogue?

As stated above, a discussion must be a dialogue. Freire (1970) suggests dialogue is essential to the development of knowledge, especially when compared to traditional passive methods of education. Moving beyond simple discussion, Mitra et al. (2017) define critical dialogue as "a process that combines the concepts of inquiry and student voice to make a difference in the world" (para 7). Utilizing classroom discussions to engage in critical dialogue with students helps prepare them to learn from hearing other perspectives and empowers students to develop and use their own voice. At the most basic level, student voice refers to children sharing their opinions about problems and solutions, but examples of student voice could also include working with adults to address these problems (Mitra, 2007). Unfortunately, student voice is not always encouraged or valued in the classroom, and current research shows few examples of student voice at the elementary level (Mitra & Serriere, 2012) despite assertions that authentic discussion should be commonplace in every classroom (Hill, 2009).

Discussion in Elementary Classrooms

While I realize, as outlined above, there are differences between the formal definitions of authentic discussion and critical dialogue, I am most interested in investigating how teachers facilitate thoughtful and meaningful classroom discussions that give students the opportunity to engage in critical dialogue and lead to students developing their own voices. Throughout this paper, I use the terms "discussion," "authentic discussion," and "critical dialogue," to refer to

this idea in varying ways. Across the literature, "discussion" can refer to any form of conversation in the classroom but most frequently references teachers engaging in conversation with students. "Authentic discussion" refers to conversions that move beyond the traditional IRE pattern. In an authentic discussion, students might not get to a "critical" level, but the discussion includes student voice and sees students exploring ideas and conducting inquiry with a group of fellow learners. The term "critical dialogue" is reserved for classroom discussions that critique aspects of society and see students move toward thinking about why those aspects exist and what can be done to change them.

Throughout the research, we find examples of students engaging in discussion and hear student voices even when discussion is not the primary purpose of the study. Bolgatz (2007) describes an activity where students engaged in both small-group and class discussions during a role-playing activity about the Montgomery Bus Boycott. In these discussions, students were able to conduct an in-depth exploration of racial issues in the South, but Bolgatz implies these discussions are not happening frequently enough. She argues "discussions such as these need to be systematic and ongoing" (p. 48). In peer-led literature discussion groups, Rice (2005) documents student responses to what she expected would be "universal themes" and, even though the primary objective of the empirical study was not how to effectively conduct small group discussions, Rice finds student voice to be powerful and suggests classroom dialogue helps elementary students develop empathy for others.

In other social studies lessons focused on inquiry, discussions are often called for as part of the lesson activities or the use of discussion based pedagogy is implied in response to the included compelling and supporting questions (Bickford, 2021; Hauver, 2017; Ledford et al., 2019). In fact, in the March/April 2020 issue of *Social Studies and the Young Learner*, all five of

the primary articles referenced including discussion in suggested lessons. Three of these practitioner articles provide guiding questions to use during discussion (Kenyon & Lampe, 2020; Saylor & Schmeichel, 2020; Shatara & Sonu, 2020), while Hagan and colleagues (2020) merely call on teachers to lead a discussion without specific guidelines for doing so. In the example provided by Hubbard, Moore, and Christensen (2020), teachers lead a discussion and briefly describe student responses, while Kenyon and Lampe (2020) provide rich examples of student voice during discussions throughout their inquiry unit.

Despite calls to include classroom discussion woven throughout practitioner journals,
Parker (2006a) says that a planned classroom discussion in any grade is "an extraordinary event"

(p. 16) and questions whether the discussion happening in classrooms is truly authentic discussion or mere recitation. Many studies document the fact that classroom discussion is typically one sided, following the I-R-E (initiation, response, evaluation) pattern and placing a premium on the transfer of information rather than the construction of meaning, and even at the middle and high school level, empirical studies show an average of 1.7 minutes of open discussion during a 60 minute class period (Applebee et al., 2003).

Authentic discussion is important in the elementary classroom for many reasons, not the least of which is the valuable scaffolding it provides. Levstik and Barton (2011) suggest that seeing teachers grapple with historical questions is just as important as seeing them read and write. Authentic discussions allow teachers to verbally walk students through the process of thinking, allowing them to use discussion to scaffold the skills necessary to participate in a discussion (Barton, 1995). Even if students require a high degree of support when they begin to engage in discussions, this decreases over time (Lewis, 2017). What this support looks like may vary from classroom to classroom, but one way teachers can scaffold classroom discussion and

critical dialogue is by offering an alternate viewpoint, using follow up questions, repeating student statements to clarify meaning, and helping student make connections to their own experiences (Serriere et al., 2017).

The process of engaging in discussion with scaffolding teaches students to articulate the critical thinking skills they need to participate actively. Our students are not faucets. We cannot expect to turn them on and watch the skills required to succeed in classroom discussion pour out (Orth et al., 2015). When these skills are neglected in elementary school, students lose the opportunity to develop them. "Ideally by the time students get to high school, [students] will have had multiple opportunities throughout their elementary and middle school years to begin developing the skills and dispositions needed to participate effectively in issues discussions" (Hess, 2009, p. 168).

Are Young Children Ready to Engage in Critical Dialogue?

Teachers frequently question whether young students are able to engage in critical dialogue. However, studies show even the youngest of our students are able to take the perspective of others, consider ethical dilemmas and participate in thoughtful conversations about hard questions (Allen, 2018; Mitra et al., 2017; Payne & Green, 2018; Serriere, 2010; Serriere et al., 2017). Mitra, Serriere, and Burroughs (2017) argue that participating in critical dialogue as citizens is only possible if you have had the opportunity to practice this skill from a young age. Hess (2009) adds:

Children can deal successfully with ideas that are developmentally appropriate and highly scaffolded. Consequently, I think it is a mistake for schools to wait until students are older to introduce these discussions. (p. 168).

Furthermore, I would argue that not only are students able to engage in critical dialogue; it is crucial that they do. According to Nance-Carroll (2021), children are not protected from the inequity that exists in the world. In many instances, they are already experiencing the repercussions that result from a lack of fairness or justice without the benefit of grappling with why inequity exists. Refusal to talk about certain topics, like racism, sexism, or politics, can be comforting to adults, but doing so leaves children vulnerable to misinterpretation (Nance-Carroll, 2021). While we, as teachers and educators, wait for young students to be "ready" to talk about fairness, equity, or justice, our students are already developing their own worldview about these issues (Serriere, 2010; Serriere et al., 2017). Boutte (2008) suggests it is hard for educators to believe that young students hold strong beliefs or opinions, but the thoughts we hold in adulthood did not wholly originate therein. They were likely formed in childhood and never challenged or questioned. Although Boutte is referring specifically to beliefs about racism and politics, we also see young children thinking in a complex way about other critical issues. For example, Howard, Swalwell, and Adler (2018) found that children at all levels had already formed some level of awareness of class inequality. In this study, even kindergarten students highlighted extreme differences between what it means to be poor or rich. My own experiences also support the idea that young students hold strong beliefs, finding that second and third grade students have already internalized strong opinions about gender roles that are difficult to disrupt (Allen, 2019).

The idea that young children have already begun to internalize their own personal beliefs based on their observation of the world is especially apparent in Boutte's (2008) observations of her own son. Many people hold to the illusion that young children do not think about issues of race. However, in a conversation with her four-year-old son, Jonathan, Boutte found that he had

already internalized messages about race that she did not intentionally teach him. Specifically, he had developed a belief that black and white people could not live together based on his observations of the world around him (and despite the fact that he did know one mixed-race couple) indicating "what parents and educators do not say or do is as powerful as what we do" (Boutte, 2008, p. 167). When we do not address complex issues with young students, they begin to internalize the behaviors they witness as what is "right," and when we attempt to rectify this problem by occasionally including books about other cultures or ethnicities or celebrating a "different" culture through shallow attempts twice a year to highlight food or music, we reinforce the idea that diversity is the exception, not the norm (Gorski & Swalwell, 2015). But this does not need to be the case: elementary teachers have the chance to help form student views of complex issues such as race through facilitating authentic discussions and critical dialogue with classroom discussions (Demoiny, 2017).

This information demonstrates the necessity of treating students as individuals who are capable of thinking about and discussing areas of ambiguity, contemplating ethical dilemmas, and considering multiple perspectives from a young age by including them in critical dialogue and listening to their voices; otherwise, we risk misinforming them through our inaction. One way this can be done is through the use of discussion strategies that lead to critical dialogue in the elementary classroom.

Leading Discussions and Critical Dialogues

Beyond the presence of young students who are ready to engage in authentic discussion and critical dialogue, teachers also need to be prepared to lead these discussions. Despite recognizing that discussions can be a powerful way to teach, leading a discussion can be one of the most challenging aspects of teaching (Barton, 1995; Parker, 2001). Some of the challenges

teachers face when attempting to foster discussions include actively listening to student responses and reflecting on them, utilizing open-ended questioning techniques, and helping children critically analyze texts (Lazar & Offenberg, 2011), despite the fact that many of these challenges are generally considered to be components of good social studies instruction (Swalwell, 2015).

Using various discussion-based teaching strategies is important for multiple reasons. First, well-designed strategies, like seminars and deliberations, can help teachers guide students in effective discussions (Parker, 2001). Second, discussions allow teachers to demonstrate verbally the concept of thinking about a process which provides a means of scaffolding for students (Barton, 1995; City, 2014; Payne & Green, 2018). This process helps teach students to articulate how they understand a question, explain an argument, listen to other students, and challenge responses. Lewis (2017) notes students receiving a high degree of support from the teacher when they first begin to participate in discussions, but as students become more adept, the teacher can reduce the amount of support she provides and give the students greater responsibility. Finally, students also learn to see multiple perspectives as they play with ideas and begin to develop critical thought, and they learn that they have a voice with the ability to question texts, laws, and authority, which is crucial in a democracy (Hess, 2004; Lewis, 2017).

Barton (1995) suggests a few key guidelines to consider when beginning to plan discussions. These involve creating a supportive atmosphere, including all students, and using instructional language. He suggests a supportive learning environment is best achieved through teaching students how to listen well, with listening skills being modeled by the teacher throughout the discussion. Students can be included and valued in the conversation by writing their ideas on the board or returning to a comment made earlier in the discussion.

In a more recent practitioner article, Swalwell (2015) recommends seven dimensions of good social studies instruction to consider when working with elementary students, the first three of which directly apply to discussion based teaching strategies and align with Barton's findings. She first suggests that teachers not only ask good questions but also listen carefully to student responses. Second, teachers must create a classroom environment where students feel their ideas are taken seriously. Third, teachers must provide space for student-generated questions, even when the questions they come up with are difficult or uncomfortable to answer.

Developing Authentic Questions

The link between discussion and questioning (i.e., discussion stemming from a "good" question) is apparent across the literature. Hess (2004) says, "Teachers who asked 'authentic' questions that elicited students' ideas instead of merely the recitation of information were much more likely to spark discussion and keep it going than the more typical 'test-like' question with one right answer" (p. 152). Unlike the "test-like" questions Hess refers to, an "authentic" question does not have a single correct answer, allowing students to think rather than regurgitate the answers they think their teachers expect. Billings and Roberts (2014) further define authentic questions as "thoughtful, open-ended questions that prompt students to seek understanding, not arrive at a predetermined answer" (p. 62). But while they agree that teachers can create questions, they suggest that teachers limit their participation to merely asking questions.

Lewis (2017) moves the idea of creating authentic questions from the teacher to the student, suggesting authentic questions are "sincere questions that students asked for which they did not have an answer" (p. 56). However, research shows teachers are frequently unwilling to accept authentic questions from students. Although allowing students to compose questions seems like a clear way for students to influence authentic discussions or critical dialogue and

become active participants in the classroom, Mueller (2016a) found teachers consistently communicated concerns about allowing students to partner in this way. In other studies, teachers were appreciative of student questions while, at the same time, not confident in student abilities to create quality questions. In his investigation of a science teacher, Rop (2002) found that even though the teacher desired to honor and acknowledge student questions, he only encouraged student questions that aligned with his lesson plan or objectives. In a similar situation, Mueller (2016b) investigated contradictions in social studies teachers' responses to student questions, finding that teachers felt student questions should be respected as entry points into content but also that students were not prepared to develop questions. These studies speak into the complications surrounding the need to provide space for student-generated questions within classroom discussions.

What Constitutes Effective Classroom Discussion?

Determining how to evaluate whether a discussion is effective is difficult, especially since, as a pedagogical tool, discussions take on many forms and have the ability to achieve multiple goals. Parker (2001) suggests looking to two models for developing guidelines for discussion, a seminar, and a deliberation. These two models serve different purposes, but they are complementary, and both are necessary (Parker, 2006a).

Referencing the first model of discussion suggested, Parker (2001) describes a seminar during which students discuss a novel noting some of the factors which make seminars successful: having a clear purpose, having the novel available during the discussion, a shared set of expectations, and an opening question that is interpretive rather than literal. The shared expectations include not raising hands, listening to and building on other's comments, inviting others into the conversation, supporting opinions by referring to the book, and tying information

from their history study into the discussion of the novel. As a result of these clear expectations, adequate preparation, and an interpretive question, students appeared to be fully engaged in the discussion. Ultimately, the goal of the seminar is not to arrive at a correct answer; instead, the goal is for each student's interpretation of the text to be challenged, clarified, and improved.

Referencing the second type of discussion identified, Parker (2001) then offers a focused look at the deliberation model of discussion during which personal views can be considered alongside alternate perspectives to come to a wise decision. He suggests this discussion strategy is an essential aspect of democratic citizenship (Parker, 2006b), and the goals in this model of discussion are distinctly different than in a seminar. In the deliberation Parker (2001) describes, the goal is to consider a matter, compare alternatives, and come to a decision. To guide his example discussion, the class generated a set of norms, which included hearing all sides equally, listening in order to respond and to build on others' ideas, the idea that talking loudly is not a substitute for reasoning, backing up opinions with reasons, and speaking one at a time. These are very similar to the guidelines for the seminar, except students in the example chose to continue to raise their hands to speak. Again, as a result of clear expectations and preparation, students appear to be fully engaged in the discussion. When students learn to explain, listen, negotiate, and compromise, they build the skills necessary for future citizenship (Parker, 2006b). However, these skills do not develop automatically. The teacher must first model how the process works, and children need the opportunity to stumble through the process over and over again. Because deliberation is a complex process, it requires practice but, Parker (2006b) asserts, elementary school is an ideal place to begin this process.

Seven Characteristics of Effective Classroom Discussion

Despite varying forms, Hess (2004) offers seven characteristics that all effective discussions should contain. First, they should focus on an interpretable topic. This characteristic links back to the idea of authentic questions. An interpretable topic does not have a single right answer, allowing students to think through various possibilities and defend their opinions by making connections to the content being studied. Serriere and colleagues (2017) label this step as "Finding a Provocative Dialogue Prompt" and also consider it to be a key part of a successful discussion.

Second, both the teacher and the student have prepared well. While what this looks like may vary depending on the grade level, content, and approach, it is immediately apparent whether both parties are prepared when the discussion begins because rich discussion does not spontaneously happen: the teacher must first set the stage through careful planning and prep work informed by theory and practice (Moss, 2002). One way teachers can prepare well is by investigating student views before designing a new unit (Swalwell, 2015). By learning what students already bring to the table on a particular topic, teachers can develop questions that are relevant and make room for issues students are interested in. Angell (2004) provides one example of preparation for a group discussion with elementary students. With children between 9-12 years old, Angell assigns students to independently read a literature selection and bring to a group discussion three questions about the characters or themes of the book.

Third, most of the talk comes from the students, not the teacher. Some researchers suggest the teacher's role should primarily be starting the conversation and keeping the ball rolling (Applebee et al., 2003). While teachers can model the behaviors they hope to see in their students, when engaging in discussions, the dominant pedagogy should shift from teacher-centered to cooperative (Serriere et al., 2017), allowing student voice to emerge and build a

community of learners where diverse views are encouraged and respected. Additionally, examples from the research show, when provided with an appropriate level of support, students can drive classroom discussion and reason in complex ways.

Fourth, enough time is spent on a single topic before moving on. Slowing down allows the discussion to deepen, moving beyond shallow, surface-level conversation. Discussion based approaches are important in teaching for in-depth understanding and many features of classroom discourse support the development of deep understanding (Applebee et al., 2003). Slowing down may be especially important at the elementary level to encourage curiosity and give students enough time to fully understand the topic and develop questions (Mitra et al., 2017).

Fifth, participants feel comfortable, but there is still meaningful argument. Creating a comfortable space for participants may be best achieved by creating an open and safe learning environment before the discussion (Barton, 1995; City, 2014; Hess, 2004; Swalwell, 2015). When students feel safe, they are more likely to offer ways in which they disagree. This is important because social issues can be emotionally charged and contemplating the idea that personal beliefs and actions might be part of the problem can be threatening (Houser, 1996). Perhaps because of this, at the elementary level, teachers are frequently found to prioritize student safety over engaging in cognitive dissonance through instructional methods such as critical dialogue. However, while agreements help reinforce a student's own thinking, engaging in cognitive dissonance helps them consider a different perspective (Lewis, 2017), and an open classroom climate where students engage in discussion is key to the development of future citizens (Engebretson, 2018).

Sixth, many people talk. More than just a handful of the class participates in the conversation, and no one dominates the discussion. In some cases, teachers may have to think of

creative solutions to ensure that all students have the opportunity to participate in discussion. For example, Hill (2009) suggests three discussion strategies that help generate contributions from all students: a four-corner debate, exit slips, and silent discussions. Using exit slips to collect student-created questions seems to be an especially useful strategy in facilitating classroom discussion that represents all of the students in class because it gives students who are uncomfortable speaking in class the opportunity to shape the discussion.

Finally, as referenced earlier in the chapter, all participants ask authentic questions and make references to ideas previously discussed. This participation shows that students are listening to their peers and fully engaged in the conversation.

Interestingly, among these characteristics, participation can be mandatory or voluntary and discussions may or may not be evaluated (Hess, 2004). Many of these characteristics of effective discussions can be seen in the research examining classroom discussion and critical dialogue at the elementary level later in this chapter.

Why Do Discussions Fail?

One reason for the absence of discussions that produce critical dialogue from many classrooms may be a result of the difficulty of successfully implementing them (Klinzing & Rupp, 2008; Parker & Hess, 2001). This absence is problematic because the lack of critical dialogue in the classroom indicates a learning environment where all knowledge worth knowing lives with the teacher (Applebee et al., 2003; Hess, 2004) and student voice is stifled. Research shows that discussions fail for multiple reasons. These include teachers doing too much of the talking or asking inauthentic questions, student contributions that lack focus and depth, and unequal student participation (Hess, 2004). Hess elaborates:

Discussions fail because only a few students have usually completed the necessary preparatory work for effective participation, because some students persistently monopolize while others are silent, because [teachers'] own facilitation skills are weak, and most significantly, because what students say is often of low quality and their remarks are often off topic (p. 152).

Teachers' Facilitation Skills are Weak

Lintner's (2006) findings show that elementary principals found "discussion/recitation" to be the most commonly used social studies instructional strategy in both K-2 and 3-5 classrooms, although as students moved into the upper grades, seat work and lectures became more prevalent. This statistic stood out to me as particularly odd, as I would never think to group discussion and recitation in the same teaching category. However, reading through the literature, I found that this was actually quite common. In many cases, teachers who claim to be leading discussions are found to be leading recitations, i.e., during a recitation, students are engaging in a question and answer flow with the teacher, rather than in authentic discussion with the class (Parker, 2006a). Many teachers did not experienced genuine discussion as a student and, as a result, were inducted into this recitation model of discussion. Parker (2001) elaborates "Classroom observations reveal that many of our 'discussions' are in fact recitations: Teacher asks a question; a student responds. Teacher evaluates the response and moves to another question and another student" (para. 3). While many teachers may have had teacher education courses that trained them to conduct discussion in a different way, Lortie's (1975) theory of the apprenticeship of observation suggests that spending at least 16 years observing and participating in the traditional IRE model of discussion is difficult to overcome (in Parker & Hess, 2001). As Parker and Hess explain:

Most of us teach pretty much as we were taught, and the collective force of this experience inveighs against leading good discussions. We have learned well the didactic IRE routine; meanwhile, most of us have not experienced alternative, dialogic modes (p. 280).

Additionally, in many cases and in direct contrast to the strategies promoted by university methods instructors, didactic discussions continue to be observed throughout preservice experiences. Hawkman et al. (2015) find that instructional strategies observed by preservice teachers were likely to exemplify didactic methods, and Heafner, Lipscomb, and Rock (2006) found that discussion of real-world events were more likely to result from student questions rather than explicit curriculum planning. These lived experiences teach future teachers that facilitating discussion is easy and not something that needs to be learned.

In addition to a lack of experience in dialogic models of discussions, teachers also fail to ask their students authentic questions. Whether a result of lack of interest, lack of training, or lack of time due to the pressure of testing, teachers are unable to consider how to choose a "mind-expanding text that is well worth discussing" (Parker & Hess, 2001, p. 278). Instead, they frequently underestimate the capacity their students have for thinking about complicated topics and, rather than asking for student opinions, "too often just ask them to recite content back to us." (Swalwell, 2015, p. 152).

Teachers or Students are Unprepared

Student conversations that venture into topics the teacher is unprepared to discuss can be dangerous because of the way they intertwine ideas of student identity, teacher identity, and personal experience. Many teachers are reluctant to discuss controversial topics because of a perceived threat to their social, professional, or personal security (Engebretson, 2018; Houser,

1996) and choose not to engage in authentic classroom discussions because they fear losing control of the discourse (City, 2014; Hess, 2004; Klinzing & Rupp, 2008). As Serriere et al. (2017) point out, this is a legitimate concern: "Dialogues — unlike fully, pre-determined lessons — cannot be controlled to arrive at a chosen conclusion, no matter how desirable that might be" (p. 11). As a result, many teachers choose to address social issues only in response to direct and persistent questioning and quickly drop them and return to safer topics (Houser, 1996). Additionally, another difficulty arises when teachers feel they are forced to choose between following a potentially interesting and engaging student-initiated question and their own need to cover specific content (City, 2014; Hostetler & Neel, 2018).

Not only do teachers need to prepare themselves, but they also need to equip their students for discussions. If students are not prepared for a discussion, the topics discussed will likely be shallow because "students who have not done the reading come to class and discuss it anyway" (Parker & Hess, 2001, p. 284). A lack of preparedness means students will jump from idea to idea without developing any of them or will share their opinions without purpose or reflection. Hess (2004) suggests a high-quality discussion focuses on only a few ideas discussed thoroughly, and discussion quality is generally higher when students are prepared to participate.

Teachers or Students Talk Too Much.

A third issue teachers face is dominating the discussion. "Teachers are not only facilitators of discussion; they must be part of — but not dominate — classroom discourse" (Libresco, 2018, p. 283). Although there is some controversy regarding when facilitators should steer the discussion or when they should remain silent (Parker, 2006a), Hess (2004) posits "It is impossible to create good discussions if teachers talk too much" (p. 152). Barton (1995) suggests a fine line between guidance and interference when he says, "you are probably constraining your

students' talk if you frequently interrupt students in mid thought to offer your ideas, or if you find yourself talking immediately after a student speaks" (p. 347). This interruption may be communicating the idea that students' ideas are not valuable. Instead, Barton suggests, take a step back and allow students to talk to each other instead of to you.

Talking too much can be a problem for students as well. In many discussions, only a few students do a majority of the talking, and objectives such as each student contributing and addressing one another rather than the teacher are not easily met (Parker & Hess, 2001). While every student does not need to contribute equally, ideally, every student would be verbally participating at least once (Hess, 2004). Students who dominate discussions also seem to intimidate other students and prevent them from participating fully. "If students believe their classmates talk too much, they are more likely to respond with silence" (Hess, 2004, p. 154). Participation decreases even more if students feel their remarks will be met with criticism from their teacher or their peers, so again, creating an "open classroom climate" (Hess, 2004, p. 153) becomes critical to equal student participation.

Examples of Successful Critical Dialogue in Elementary School

Despite the fact that facilitating critical dialogue is a challenging skill for teachers to master, throughout the literature, there are excellent examples from both classroom practitioners and university scholars that demonstrate young students' abilities to participate in critical and complex conversations. While these conversations can be centered in multiple subjects, a majority of the examples shared here occur within the field of social studies, focusing on the actions of fictional characters within picture books, historical events, personal reflection, and engaging in the world as citizens.

At the elementary level, analyzing rich literature and picture books often provides an entry point into classroom discussions and critical dialogue by providing a comfortable distance from complex issues (Bersh, 2013; Cipparone, 2014; Demoiny & Ferraras-Stone, 2018; Libresco, 2018; Serriere et al., 2017). "Picture books are valuable cultural artifacts that allow the exploration of contemporary institutional social values and ideologies" (Bersh, 2013, p. 49). They have the ability to engage students in group discussions, help students develop their voice, and serve as critical thinking tools by helping students analyze diverse perspectives.

Cipparone (2014) provides an example of a fourth-grade class discussion analyzing diverse perspectives on immigration using the book *Pancho Rabbit and the Coyote*. In the book, a rabbit travels north to earn extra money for the family but, when he does not return home, his son Pancho sets out to save him. On the way, he meets a coyote who takes advantage of him, but luckily Papa Rabbit shows up just before the coyote is about to complete his plan for a tasty rabbit dinner. This book provides a strong allegory about immigration for students to grapple with rather than talking directly about their personal experiences with immigration (which many students in the class might have had). Students were able explore the topic by participating in critical dialogue about the characters in the book and making connections to a complex issue. Ultimately a student concluded: "I think the book is trying to say that many Mexicans who try to immigrate lose their sense of self and lose their hopes" (p. 12). As immigration will be an important issue for many of the students in this classroom, engaging in critical dialogue about the issue helps to prepare them to be active citizens.

Another group of researchers, led by Serriere (2017), worked with kindergarten students on different occasions to discuss ethical dilemmas through the use of picture books. In discussing *Hey, Little Ant*, the kindergarteners question whether or not an ant is a crook and deserving of

death because he steals food. One student, Eric, chooses to challenge the binary of right versus wrong and suggests that perhaps the ant is simply "in the middle." Serriere et al. (2017) speculates, "This dialogue seems to provide evidence that, from a young age, children can begin to reason in complex ways — considering others' perspectives and recognizing the potential for ambiguity in moral judgment and justice" (p. 11). Throughout this conversation, the teacher played a valuable role by providing follow up questions, repeating the students' own ideas, and discerning student abilities to engage in dialogue. A teacher could also share an alternative viewpoint not yet represented in the text or the dialogue. Through actions such as these, the teacher actively fosters a space for dialogue, scaffolding engagement throughout the classroom discussion.

Within the same study, Serriere et al. (2017) describe a different conversation with the same kindergarteners about the classic book *Frog and Toad Are Friends*. In the book, Toad tells Frog he is not at home when he actually is at home. In the class discussion that followed, the class considered if and when it is okay to tell a lie. Some felt Toad was lying while others said he was just "tricking" Frog. While the students did not come to a general consensus or formulate a "right" answer, they did have an in-depth discussion about a serious ethical issue - is it always wrong to tell a lie?

The conversation Serriere and her colleagues (2017) had with kindergartners is similar to one shared by Cowhey (2006) in *Black Ants and Buddhists*. In the prologue, Cowhey shares the story of her students discussing whether it is appropriate to kill ants. When black ants make their way into the classroom, some of the students want to kill them because they do not belong, but one student, Som Jet, speaks up in defense of the ants, saying they do not harm anyone and are just trying to clean up the snack mess the class has made. Cowhey intercedes in this conversation

to allow Som Jet to express his opinion to the class. Ultimately, the class decides to let the ants live and engage in an enthusiastic cleanup effort to try and prevent them from coming into the class in the future. This example not only shows that students are capable of engaging in critical dialogue, addressing the question of whether all living things, including insects, have a right to live, but also provides a strong example of how a teacher can guide and support these conversations in the elementary classroom.

While these examples focus on fictional characters and insects, subjects within the field of social studies also lend themselves to promoting critical dialogue among young students. In a fifth-grade classroom, Payne and Green (2018) worked with students to help them understand how their identities impact their worldview. In a unit consisting of three 50-minute class periods over the course of a week, students were challenged to deepen their understanding of their own identities and worldviews. Students created concept maps, identified the important pieces from the map that helped shape their worldview, and created lenses that displayed the aspects of their own identities that most influenced their worldview. Each stage in this process started with a classroom discussion where the teacher modeled the task at hand. For example, during the second activity, the teacher used her own identity concept map along with discussion from previous class discussions to audibly evaluate how different pieces of the map affected her worldview. Following this discussion, students were asked to carefully consider the question "What has influenced me the most on how I experience the world?" (p. 6). Because students had seen the teacher walk through this question during the class discussion, they could more successfully explain how different aspects of their identities influence the way they experience people and events in a unique way.

Payne and Green (2018) refer to this series of lessons as a touchstone that was consistently referred back to in classroom discussions throughout the school year. Even without prompting, students frequently referenced the ideas of identity and worldview. For example, in a history lesson about the Chicano civil rights movement of the 1960's, students found out that schools in East Los Angeles banned children from speaking Spanish at school. In response, one student exclaimed "They're trying to take off [students'] glasses!" (p. 7). Other students in the class agreed this was an attempt to strip students of an important part of their identity. Later, during a unit about slavery and the American Civil War, a student asked, "Was slavery genocide?" (p. 8). This study demonstrates three compelling reasons to prioritize classroom discussion in the elementary classroom. One, scaffolding discussion experiences through techniques like the teacher audibly modeling their thought process can have visible impacts on student ability to ably participate in discussions (which supports the ideas of Barton (1995), Levstik & Barton (2011), and Lewis (2017) mentioned above). Two, as suggested by Hess (2009) and Paley (1992), elementary students are capable of engaging in critical dialogue, even at the elementary age. Three, while this is less significant to this study but important to understanding the body of this work, classroom discussions such as the ones examined by Payne and Green here help students develop disciplinary tools for future inquiries, not only in social studies but also in their lives outside of school.

Teachers can also guide and support critical dialogue more personal to students themselves by guiding students to critique their own behaviors. Using a teaching strategy dubbed "Carpet Time Democracy," Serriere (2010) takes digital photos of students engaged in play in a university preschool learning environment. She then quickly uploads the pictures and uses them to conduct a critical dialogue with students, which she calls photo-talks. These talks center

around four central themes: getting to know the child, envisioning social change, envisioning your "best self" or "best classroom," and considering fairness and equality. In the examples of student voice that result from the photo talks, we find students analyzing their own behavior and even acknowledging they may have acted unfairly. Serriere suggests these moments "illustrate children's capability to articulate and re-envision what they do and why" (p. 65).

Other studies support the idea that students have the ability to engage in critical dialogue about themselves, particularly by participating in class meetings (Allen, 2018; Angell, 2004). Angell (2004) reports that, through regular engagement in student-led class meetings, by February, a majority of students in both public and private school settings were able to discuss issues of concern, like bullying, without interrupting each other. However, teachers have a clear role in this process, providing the structure and scaffolding necessary to help young children feel safe enough to speak openly (Swalwell, 2015), developing relationships (Payne, 2018), and implementing teaching strategies like the ones outlined above: carpet time democracy, photo talks, or classroom meetings. These strategies also help young children develop student voice and engage in critical dialogue about personal experiences.

Mitra and Serriere (2012) suggest "part of the work of student voice activities includes developing shared meaning making" (p. 747). In each of the examples above, students and teachers engage in critical dialogue to craft shared meaning making, whether that is through the literature and history they interact with, regular classroom routines, or even self-analysis. But critical dialogue and development of student voice also prepare students to be active citizens who use their voices to make change in their community and in the world, and this can happen even while they are still in elementary school.

At Dewey Elementary School (DES), Mitra and Serriere (2012) found three girls who felt the salad offerings were unfair and did not reflect the diversity of their student body. Because every salad automatically included ham, cheese, and croutons, many students were unable to eat it due to allergies or personal beliefs. The girls brought their concerns to their teacher, who partnered with them to address the issue. After months of civic action, including classroom votes, school assemblies, and meetings with both local school and district leadership, the options were changed so more students could enjoy salad at lunch. This case is particularly important for thinking about the ways teachers support both critical choice and student voice. If the girls' teacher had discouraged their questions and silenced their voices, this change might not have occurred. Taking it one step farther, if the girls' teacher was known for discouraging questions and silencing student voice, they might not have even asked in the first place. This example demonstrates one reason it is vital for teachers to create a space where critical dialogue and student voice can thrive.

Necessity of Teacher Support

Simply suggesting that elementary school teachers engage in authentic discussion or critical dialogue or asking them to encourage student voice is not enough. Fostering dialogue takes practice and intention, and methods professors, field supervisors, and school administrators should all support teachers attempting to engage in these activities (Demoiny, 2017; Hawkman et al., 2015; Mitra et al., 2017). Demoiny suggests:

In order for elementary teachers to teach race within their social studies lessons, they must understand the need to do so and receive effective training within their teacher education programs... Although there are practical examples of how in-service teachers incorporate race into elementary social studies lessons, it is unclear how social studies

teacher educators prepare preservice teachers to do so once they have affirmed the need for it (p. 26).

While Demoiny is talking specifically about discussions of race in elementary classrooms, the same might be said of any complex issue that could be viewed as controversial. Even when teachers want to address these complex issues, research shows if they do not feel they have been explicitly prepared on how to teach them or how to interact with community members who might object to students being introduced to complex issues, they simply avoid engaging in those discussions (Demoiny, 2017; Engebretson, 2018).

While participating in discourse structures as part of teacher education programs can provide models for teachers to use in their future classrooms (Parker, 2006a), overwhelmingly, the research also supports the idea that the instructional strategies, including discussion based strategies, introduced in elementary methods courses need to be supported by the observations that happen in field experiences (Demoiny, 2020; Demoiny, 2017; Hawkman et al., 2015).

Cuenca (2020) asserts "the bifurcation of teacher education into coursework where academic learning takes place and field experiences where the professional application of that learning occurs signals to prospective teachers that field experience is where learning to teach actually takes place" (para. 1). This observation is problematic for several reasons, not the least of which is because it indicates a distinct difference between the instructional strategies encouraged by university professors and the ones implemented by inservice teachers. Developing well equipped teachers who are prepared to facilitate discussion will require changes on many levels, one of which may be finding ways for preservice teachers to observe and participate in discussion based instructional strategies in the field as well as the methods classroom.

However, the responsibility to prepare teachers does not fall to the university alone. Just as it is essential to note the importance of the teacher's response to questions in the case of the salad girls, as we did above (Mitra & Serriere, 2012), it is equally important to talk about the culture of Dewey Elementary School. Teachers at DES indicated that "Principal S. possessed a strong sense of the vision of the school as a space for student voice and inquiry" (p. 767).

Additionally, at Dewey, teachers were engaged in their own inquiry processes with colleagues and interns, focusing on how to increase the connection between global events and their students' lives. Because of the strong vision of the school developed by school leadership and because space existed for teachers to ask questions professionally, teachers actively worked to create those same spaces for their students (Mitra & Serriere, 2012).

Unfortunately, many teachers do not work in such an environment, and even if they do, this does not guarantee that teachers will implement and facilitate the techniques encouraged and supported. In an empirical study focused on the inclusion of conflict dialogue in elementary and middle schools, while to some degree all of the teachers involved were able to implement dialogue conflict pedagogy, Bickmore and Parker (2015) found:

Even in these purposively sampled classrooms linked to professional development on dialogic conflict education, relatively few of the lessons we observed addressed controversial or sensitive issues in ways that invited sustained, passionate, and inclusive exchange among disagreeing viewpoints (p. 292).

In summary, Bickmore and Parker's (2015) study finds a surprisingly low number of classroom observations that included in depth conservations about areas of concern or decision making, despite purposely seeking out classrooms where teachers wanted to infuse conflictual conversations and thought they were successful in doing so. This finding supports research that

shows facilitating effective discussions is difficult, even for experienced educators, and teaching teachers how to lead them can be just as challenging (Parker & Hess, 2001).

Professional Development in the Social Studies

Research showing a lack of ability for facilitating discussion by inservice teachers points to a need for effective professional development that helps teachers construct knowledge and skill in this area. Studies about effective professional development inside and outside of the field of social studies offer considerations for developing professional development sessions that positively impact teacher behavior in the classroom. In her core conceptual framework for studying professional development, Desimone (2009) suggests five critical features of professional development, including a content focus, active learning, coherence, duration, and collective participation. These five critical features are succinctly defined by Desimone and Pak (2017):

(a) content focus: activities that are focused on subject matter content and how students learn that content; (b) active learning: opportunities for teachers to observe, receive feedback, analyze student work, or make presentations, as opposed to passively listening to lectures; (c) coherence: content, goals, and activities that are consistent with the school curriculum and goals, teacher knowledge and beliefs, the needs of students, and school, district, and state reforms and policies; (d) sustained duration: PD activities that are ongoing throughout the school year and include 20 hr or more of contact time; and (e) collective participation: groups of teachers from the same grade, subject, or school participate in PD activities together to build an interactive learning community (p. 4-5).

Similarly, in developing the Quality from Within professional development approach, Zwart et

al. (2014) incorporate a combination of principles to guide the teacher learning process. These

include building on the needs and concerns of the participants, practicing in authentic situations, promoting individual reflection, enhancing/promoting transfer, and promoting engagement at the team and school level. Indeed, throughout the body of work produced by Korthagen (Korthagen, 2017; Korthagen & Kessels, 1999; Korthagen et al., 2006; Zwart et al., 2015), reflection continually appears as a key component in the teacher education process whether referring to preservice or inservice teachers.

While schools do generally provide professional development opportunities for inservice teachers, limited research within the field of social studies demonstrates that these opportunities are not always effective and sessions that address any of the four social studies content areas are rarely provided.

Brugar and Roberts (2017) suggest in elementary schools, professional development time is generally focused on tested content areas (like math or reading) while untested content areas are typically not addressed. When Brugar and Roberts asked elementary teachers about professional development opportunities related to social studies, they were met with "blank stares - it simply did not exist in their experiences" (p. 262). In their study, which describes a series of professional development experiences focused on visual literacy in elementary social studies, they work with seven elementary school teachers, grades 3-5, to provide an "embedded intervention that research suggests is most likely to influence teacher practice and, in turn, student outcomes" (p. 271). This study provides a nice model that meets Desimone's (2009) recommendation that successful professional development focuses on content, takes place over a sustained duration, engages participants in active learning, provides coherence, and offers an opportunity for collective participation.

Much of the available research related to professional development in the field of social studies centers around lesson study. Lesson study is a type of professional development that seeks to improve classroom instruction and student learning through collaborative planning of a lesson, followed by teaching and/or observing of the lesson, and a debrief of the lesson after it has been enacted (Halvorsen & Kesler-Lund, 2013). In their analysis of a set of three lesson study cycles in fifth grade classrooms, Halvorsen and Kesler-Lund (2013) found three key themes that made lesson study professional development effective: "(1) Teachers must have a good working relationship; (2) Teachers must commit to lesson study and curriculum design; and (3) Teachers must agree that reflection is a useful tool for improving lesson" (p. 127). These findings are similar to the five critical features outlined by Desimoine (2009) above and again highlight the need for reflection (Korthagen et al., 2006; Zwart et al., 2015). Particularly, Halvorsen and Kesler-Lund point out that teachers must be convinced that participating in lesson study would lead to improvement in instruction or student learning, and teachers found analyzing successful and unsuccessful lessons through group reflection was particularly productive. In conclusion, they point out a need for more research evaluating professional development programs in the field of history instruction.

Comparably, Callahan, Saye, and Brush (2016) conducted professional development for inservice history teachers about problem-based historical inquiry and historical domain knowledge. In the study, they attempted to address several known concerns associated with professional development: the workshop problem, incoherent curriculum, and poor delivery. The workshop problem refers to the typical time frame of social studies professional development: a one day workshop or several day institute with little to no follow-up or ongoing support.

Incoherent curriculum refers to the idea that the content included in professional development

programs is frequently unrelated to teachers' beliefs or the school curricula. Poor delivery refers to the delivery method. Many professional development sessions feature passive learning like listening to lectures rather than engaging in active learning experiences that model instructional strategies and require participants to engage as learners (Callahan et al., 2016). These three concerns directly correlate with three of Desimone's (2009) five critical features of effective professional development: sustained duration, coherence, and active learning. In providing a professional development experience that disrupted these problematic norms of ineffective professional development, Callahan et al. (2016) found that, over time, participants did aspire to more ambitious teaching, but their program did not provide adequate support to help them achieve those goals. However, this "buy-in" was in and of itself a major accomplishment as Callahan et al. suggest that aspiration to improve is one of the biggest hurdles to overcome within instructional reform.

Within the same study, Callahan et al. (2016) noted two specific needs, including providing teacher support in selecting resources for inquiry and "planning classroom conversations to facilitate students' inquiry" (p. 238). As noted above, even when classroom teachers want to engage in authentic discussion or critical dialogue with students, many feel unprepared to do so. Within their study on professional development, Callahan et al. (2016) support this observation and suggest that teachers "need stronger support in creating opportunities for students to substantively discuss ideas" (p. 239). In reflecting on the professional development they provided during the study, they note they could have helped teachers develop the skills necessary to develop a script of questions that moved from lower to more sophisticated levels of thought, and that deeper preplanning and a discussion guide could have better prepared the teachers in the study to facilitate discussion. This observation aligns

with Parker and Hess's (2001) suggestion that leading a productive discussion is one of the most challenging tasks a teacher faces, and Callahan et al. (2016) suggest embedding examples of a spiraled questioning script within professional development materials or leading participants through a think-aloud that demonstrates the thought process involved in creating such a list could be particularly helpful in developing professional development sessions that help address the need for increased instruction about facilitating discussions.

Theoretical Framework

There is much that can should be done in both preservice and inservice teacher education to better prepare educators of young children to utilize discussion-based teaching strategies that lead to critical dialogue (Boutte, 2008), and "thinking creatively about how to educate and induct our novice teachers into a culture where democratic dialogue and pluralism are valued is key" (Engebretson, 2018, p. 46). As we see from Bickmore and Parker (2015), even when professional development in a specific instructional strategy is available and teachers want to successfully implement that strategy, they are not always effective in doing so. This begs us to consider how teachers learn and internalize new information about teaching in ways that impact their classroom practice. Is effective professional development, as outlined by Desimone (2009) and Zwart et al. (2015), enough, or is there more to learn and apply to teacher education about the ways teachers construct knowledge?

The call for more research on how teachers learn is evident throughout the literature as we see in Hamilton, Pinnegar, and Davey's (2016) assertion that "every review of research on teacher education published in the last decade has argued the need for stronger research to guide teacher education and teacher educators." This is especially true within the field of social studies where little research on professional development exists and scholars have called for more

studies in the field (Callahan et al., 2016; Halvorsen & Kesler-Lund, 2013). In relation to this need for more empirical studies, I suggest one way we can begin to better prepare teachers is by investigating the way they learn and reevaluating how we, as teacher educators, provide instruction in both theory and pedagogical practice within the field of social studies and, more specifically, facilitating classroom discussions.

Theoretically, I take as a starting point conceptions of how teachers construct personal knowledge and how this personal knowledge manifests itself in teaching behaviors and practices. Korthagen (2010) notices novice teachers' attitudes change quickly from idealistic behaviors to more custodial ones; an idea that is reinforced by Lazar and Offenburg's (2011) observations of teachers. Unfortunately, there is not convincing evidence that teacher education programs make any difference in actual teaching practices (Cochran-Smith & Zeichner, 2005). Although some studies demonstrate the opposite, a question about the effectiveness of both preservice teacher education programs (Grossman, 2008) and inservice professional development (Callahan et al., 2016; Desimone, 2009) exists. There is a sizable gap between theory and practice within teacher education (Korthagen, 2017; Korthagen & Kessels, 1999; Korthagen et al., 2006). As a result, even if prospective teachers have been taught pedagogical methods that are backed by theory, they may or may not be able to implement them when they arrive in the classroom. According to Korthagen (2010), there is a difference between "the nature of the knowledge existing in the minds of teachers that really helps them to act effectively, and the knowledge as it is taught in teacher education" (p. 99): a noticeable divide between theory and practice.

One area this divide is present is in our conceptions of knowledge. Meek (2011), drawing on the work of Michael Polanyi, claims that if knowledge is just information, then education could happily exist as the passive transfer of content, and, as we see in many

classrooms, it does just that. Korthagen (2010) believes that is also true of teacher educators, as "many of them seem to forget that educational knowledge cannot be simply 'transmitted' to teachers and thus improve their actions" (p. 99). Instead, the perspective of "knowledge as information" creates passivity, indifference, inaction, and compartmentalism, among other things, in learners. This acceptance of knowledge as information is what is assumed when Desimone (2009) calls out active learning as a critical component of teacher professional development. Meek (2011) affirms that pedagogical practices such as "replacing lecture with discussion formats in classes, service learning, and experiential learning are strategies which have been embraced to address the felt but often undiagnosed adequacy of the defective epistemic model" (p. 132) but suggests this is not enough. As teacher educators, it is especially important to investigate the ways in which teachers learn to apply education theories to their pedagogical practice. This will help us address the divide between theory and practice, but also assist us in reforming teacher education in a way that challenges this false dichotomy, through the idea of "knowledge as transformation" rather than "knowledge as information" (Meek, 2011).

If teachers do not learn simply from being presented with educational theories, how then do they learn? While many theories about the construction of knowledge exist, I will primarily focus on one, Polanyi's theory of personal knowledge (1958), along with its connection to ideas surrounding embodied knowing (Barbour, 2016; Belenky et al., 1986; Grosz, 1994; Merleau-Ponty, 1962). I will also address popular theories of knowledge, like personal practical knowledge (Clandinin & Connelly, 1987), the apprenticeship of observation (Lortie, 1975), and situated learning (Lave & Wenger, 1991) which align with the underlying principles of Polanyi's ideas in various ways.

Constructing Personal Knowledge

In his theory of personal knowledge, Polanyi suggests that "all knowing is profoundly incarnated in the human person, and there is no impersonal knowing or knowledge" (Poirier, 2011, p. 219). As a result, who one is at a specific moment in time has a significant impact on the decisions they make. Decisions are made out of an individual's way of being in the world at the time the decision is made, and, with the passage of time, decisive abilities continue to grow and change (Poirier, 2011). Because an individual is never the same person that they were week after week, year after year, they are apt to make slightly or significantly different decisions over the passage of time.

Contextually aligning with both Lortie's (1975) apprenticeship of observation and Clandinin and Connelly's (1987) theory of personal practical knowledge, Polanyi asserts the community in which an individual develops and matures has a profound effect on what he/she later affirms in life (Poirier, 2011). Meek (2014) draws on this assertion and suggests that, while personal knowledge is individual in nature, knowing can only be done together with others. She says:

A solitary knower has already appropriated a language, a culture, a tradition. Each knower has submitted to authoritative guides in order to be taught or trained. Each has embraced a shared way of seeing the world. Each has acquired skill sets and formal theoretical frameworks. But we all have a unique way of seeing and relating to the world, too... Our experiences and training distinguish us from each other...We can capitalize on the diversity we bring to a team... in order to know (p. 21).

Polanyi (1958) further suggests that, in any field where the endeavor is "knowing," those seeking knowledge should seek out a master/apprentice relationship, deliberately seeking to be

influenced by the discipline's finest practitioners. This reference to movement from newcomer to expert aligns with Lave and Wenger (1991) theory of situated learning. Situated learning theory suggests learning successfully occurs when the learner has the opportunity to practice new skills in authentic settings within a community of practice. However, in the field of education, we suffer from two powerful influences that do little to assist preservice teachers in this endeavor. First, all educators come to the profession after already participating in some form of education for at least 16 years. These educational experiences, whether positive or negative, shape a teacher's perception of suitable pedagogical practices, and this perception is not easy to change during traditional teacher education programs. For example, because many teachers were educated using the traditional "initiation-response-evaluation" method of classroom discussion and teacher-student interaction, they have a tendency to lean on that structure during classroom instruction (Parker & Hess, 2001). Theoretically, the experiences aligned with the apprenticeship of observation (Lortie, 1975) have a powerful impact on a teachers' personal knowledge and on their ability to implement teaching strategies that depart from their own experiences. Second, even in a teacher education program, preservice teachers do not always get the benefit of observing and working with classroom teachers in the field who would be considered "masters." For example, while Hawkman and a team of researchers (2015) assert that working with a master teacher has the ability to bring about an identity change in preservice teachers, they find inconsistencies in the field experiences of those preservice teachers. "Some classroom teachers welcomed and incorporated our participants as integral components in their classes, while others asked the PSTs to make copies and run errands around the school" (p. 204). Additionally, they find that preservice teachers rarely observe social studies "instructional strategies related to those advocated in their methods courses" (p. 203) and when they do observe constructivist teaching

strategies, such as conversations about real world issues, cooperating teachers do not provide a model of how to facilitate these strategies structurally. Korthagen et al. (2006) further assert that not only are many of these settings not ideal, the experiences preservice teachers engage in during student teaching are frequently counterproductive to teacher learning and the production of new knowledge if these experiences do not match up with what they learned in their teacher education courses.

Connections to Embodied Knowing

The knowledge teachers bring with them to the classroom, whether that is part of their personal and professional experiences, their social, moral, or intellectual identity, or their educational experiences, all impact the way they choose to structure and prioritize learning experiences for their students. This knowledge, the embodiment of lived experiences, provides a perspective for evaluating their decisions about pedagogical practice and curriculum-making.

The idea of embodied knowledge originates in the work of Merleau-Ponty (1962). He described the ability of knowing how to type as "knowledge in the hands" (p. 144), a skill that exists within the body and is unable to be detached. While it is knowledge that is known throughout the body in practice, it is not consciously known or able to be articulated by the mind. He posits it is the body, not just the mind, which understands and experiences the world. Mind and body are connected, and embodiment is the existential condition of existing in the world. Theories discussing embodied knowing suggest embodiment incorporates many things as one, but it also includes recognition of individual differences as it looks at the holistic experience of the knower. "Knowing and being are woven inextricably together... the ontological status of entities is not tied largely to 'existence' and tangibility, but to an entity's intelligibility and its prospect for greater intelligibility" (Mullins, 2007, p. 37).

Feminists related to Merleau-Ponty's assertation that every person was uniquely embodied, and in 1986, Belenky and colleagues used this work as a starting point to develop the idea of women's ways of knowing. In this theory, they describe five epistemological strategies, including silence, received knowledge, subjective knowledge, procedural knowledge, and constructed knowledge. Barbour (2018) builds on these strategies by introducing a sixth category, embodied knowledge, in which all knowledge is viewed as contextual and embodied. The knower, in this case a woman, "experiences herself as creator of, and as embodying knowledge, valuing her own experiential ways of knowing and reconciling these with other strategies for knowing, as she lives her life" (p. 234). Embodied knowing then, attempts to integrate intuitive and experiential knowledge with information gleaned from others and with a conscious awareness of how this knowledge is embodied. She elaborates "Rather than only occurring through reasoning of a neutral subject, knowing can occur through experiencing. In this sense, knowing is a practice rather than simply a method of deductive and inductive reasoning." (Barbour, 2018, p. 212).

Moving this idea into the realm of education, the idea of knowing bodies has implications for the way we think about teaching students as well as educating preservice and inservice teachers. Grosz (1994) says lived experiences are always embodied, and Wilcox (2009) suggests "when educators bring in speakers, invite students to reflect on their own experiences, or engage students in community-based learning, they practice embodied pedagogies that mobilize lived experiences" (p. 106). However, Wilcox goes on to assert that presently, pedagogical innovation has not fully realized the transformative potential of embodied knowledge. If we want to reform the teacher education process, we must, as stated earlier, reconstruct teacher education into a process that champions "knowledge as transformation," and to do this, we must consider how

teachers move from the passive mindset of knowledge as information with little to no connection to classroom practice into the realm of embodying ideas and allowing them to dwell within.

Subsidiary Focal Integration

The ideas of Merleau-Ponty (1962) intertwine with the ideas of Polanyi (1958) in that both articulate every act of tacit knowing as having a subsidiary-focal relation that is being cast and recast continually in concrete circumstances (Takaki, 2009). For example, Polanyi (1958) suggests knowledge is acquired through a process he calls subsidiary focal integration. Focal awareness and subsidiary awareness are mutually exclusive. You cannot have one without the other; you must have both in order to learn new information. In this learning process, Poirier (2011) explains:

We acquire explicit knowledge of something by focusing our attention on that something as if it were an object standing before our subjectivity, and we know that something very explicitly, with the passage of time, that something that we originally knew sinks deep into our consciousness, as it were, and is, so to speak, fuses with our identity as a person. It becomes part of who we are, so that it is possible for us to say that we grow our identity as persons by knowing something explicitly, and with the passage of time that something converts itself into our being, and throughout our lifetime, we draw on this way-of-being to expand our knowledge and further develop our being to the point where a great authority in any field of study is not the person who has the largest amount of strictly explicit knowledge, but the person who has become the greatest being" (p. 223).

What Poirier is describing is the "focal" part of subsidiary focal integration. When we attempt to learn something new, we must focus on it, while at the same time we are subsidiarily aware of

things that we are not focusing on, things we know so well they no longer require our attention.

For example, Polanyi (1958) says "when we use words in speech or writing, we are aware of them only in a subsidiary manner" (p. 57). In this situation, words are tools that help us acquire the new information we are focused on. We are not thinking about the letters and sounds that the words are made up of, nor are we thinking about the structure and style of the writing (unless it is very poor). Those elements have become part of our subsidiary and are no longer the object of our attention, but instruments of it. Said another way, they have become part of our embodied knowledge.

If, instead of words and sounds, we consider the tools to be educational theories and teaching strategies, we begin to understand how knowledge is transformative rather than merely informative. When teachers have focused so intently on educational theories and teaching strategies that they move from a focal position to become subsidiary, teachers are able to pull these tools out effortlessly when the need arises. When that process is successful, when teachers begin to indwell that knowledge, we observe teachers approaching a problem they feel well equipped to handle, subconsciously using their subsidiary personal knowledge, which now includes educational theories and teaching strategies alongside their personal history, memories of participation in a community of learners, and their professional experience. Again, this aligns with the ideas of personal practical knowledge as it refers to a teacher's perceptions, their ways of thinking, understanding, and doing as well as their beliefs and principals that demonstrate the experimental and embodied nature of knowledge and practice (Clandinin & Connelly, 1987). Unfortunately, in many cases, when prospective teachers begin teaching, they have to actively work against the subsidiary knowledge gained during their own education experiences through the apprenticeship of observation.

Link to Personal Judgment

Moving back to the idea of personal knowledge, Polanyi (1958) also accounts for the element of personal judgement. He contends:

All theory may be regarded as a kind of map, extended over space and time. It seems obvious that a map can be correct or mistaken, so that to the extent to which I have relied on my map I shall attribute to it any mistakes I made by doing so (p. 4).

Relying solely on theory for all decision making leaves out the notion of personal judgment involved in applying theory to real situations. If we consider theories to be a set of rules that is generally true, they can only function within a framework of personal judgment. Drawing beyond the more immediate bodies of work informing this study, I also found this idea reinforced by Hamilton et al.'s (2016) critique of a movement to train teachers instead of educating them. Without marrying both theory and practice within teacher education programs, teachers enter the classroom unprepared to use discernment to respond to complex situations or variations of context and instead just attempt to duplicate practice without understanding why. Alternatively, when teacher educators provide effective instruction that combines both theory and practice, teachers are more likely to develop the ability to respond to nuance, integrate context and content, and consider their own personal practical knowledge when making decisions (Hamilton et al., 2016).

Summary of Key Ideas from the Literature Informing This Study

Throughout the literature, we see that classroom discussion is an essential part of social studies instruction, not only to the development of active learning environments where knowledge lives in both the teacher and the student, but to the creation of citizens that are prepared to participate in a democratic society. Research also shows that students, including young children in our elementary schools, are ready and able to participate in these discussions.

Unfortunately, in both elementary and secondary education, many teachers lack the ability to facilitate authentic discussion and critical dialogue. While there are many reasons discussions fail, one key reason may be a lack of experience participating in authentic discussion in formal education environments. There is a need for effective teacher education and professional development opportunities about facilitating discussion for both preservice and inservice teachers. These opportunities should build on what we know about the ways teachers construct knowledge and bridge the gap between theory and practice to provide instruction that teachers are able to embody and implement as part of their classroom practice.

CHAPTER 3

METHODOLOGY

Qualitative studies place a high degree of emphasis on people's lived experiences (Miles et al., 2014). They focus on "naturally occurring, ordinary events in natural settings" (p. 11) and allow us, as researchers, to grasp a sense of what real life looks like. Like this study, qualitative research is frequently carried out in a local setting for an extended period of time. In addition to searching for the meaning of events and connecting those meanings to the social world (Miles et al., 2014), qualitative data provide rich, "thick descriptions" that provide a clear picture of experiences and events (Geertz, 1973). Additionally, qualitative studies draw from multiple sources of evidence in hopes of providing a complete perspective and drawing reasonable conclusions about an idea. In addition to being based in the principles of basic qualitative research, the present study was informed by ideas of intimate scholarship (Hamilton et al., 2016; Strom et al., 2018) and utilized grounded theory methods of analysis (Glaser & Strauss, 1967).

Intimate Scholarship

Intimate scholarship can be described as a qualitative methodology that directly engages a researcher's personal experiences, knowledge, and practices as the focus of inquiry (Strom et al., 2018). It can utilize multiple methodologies but is labeled as intimate first because of its subjective nature (Hamilton et al., 2016). Strom et al. (2018) further define intimate scholarship as a process that:

enables a sensitivity to the relational and temporal aspects of how meanings, practices and identities emerge in educational settings... [it] provides a way to plug into and engage with educational phenomena that often remains hidden or ignored in other forms of research (p. 3).

This type of research is intimate because it considers understandings of self and personal experience in relationship with those we, as teacher educators, educate and our expectations of the students they educate (Hamilton et al., 2016), and is capable of making the "emotional, tacit, embodied knowing of our practice explicit" (p.28).

Because of this engagement with personal experience, researchers who investigate teacher education from within teacher education structures have the ability to further conversations about the construction of knowledge through the exploration of theories and analysis of practice in ways that those outside the structure would not, existing in the midst of practice theory divide. Subjective research methods, like intimate scholarship, allow the development of more nuanced, local understandings of theory while providing the kind of knowledge that has the ability to fuel, energize, inform, and improve practice (Hamilton et al., 2016). Because of this unique placement, intimate scholarship studies have the potential to simultaneously transform multiple sites of inquiry, including research in both teacher education and pedagogical practice (Craig & Orland-Barak, 2015). However, this research requires the researcher to first acknowledge their own understanding of self and their relationship to the study, necessitating a situating of self as a participant (Strom et al., 2018) within the context of the study and research findings that clearly acknowledge relevant aspects of their own personal practical knowing (Hamilton et al., 2016).

Research Design

There is no question that lived experiences influence teacher practices (Parker & Hess, 2001), but even when professional development is available and teachers want to implement new strategies successfully, they are not always effective (Bickmore & Parker, 2015). This begs us, as teacher educators, to consider how teachers learn and internalize new information about teaching

in ways that impact their classroom practice. This qualitative study investigates why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot - in this case, considering how teachers learn as evidenced by implementation of new techniques to facilitate discussion during social studies into their elementary classroom practice.

To explore my primary research question, "Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?", I will also consider three supporting questions:

- 1. How do elementary teachers describe and explain their personal experiences with classroom discussion?
- 2. In what ways do elementary teachers respond to professional development about classroom discussion strategies?
- 3. After receiving instruction in specific pedagogical strategies, how do elementary teachers facilitate discussion and/or utilize discussion to facilitate critical dialogue?

First, I investigate how teachers describe and explain personal experiences with classroom discussion. As outlined in the previous chapter, though teachers may have had teacher education courses that trained them to conduct discussion in a different way, Lortie's theory of the apprenticeship of observation (1975) suggests that spending at least 16 years observing and participating in the traditional initiate-respond-evaluate (IRE) model of discussion is difficult to overcome (in Parker & Hess, 2001). These lived experiences influence teachers and their ability to conduct or participate in authentic discussion or critical dialogue.

Second, I consider how teachers respond to professional development experiences about particular pedagogical strategies. Hawkman et al. (2015), Grossman (2008), and Korthagen

(2010) suggest teacher education has a disappointing impact on teacher behavior. Given this, this study investigates the ways teachers' personal experiences lead to using their own education as a model for how they facilitate discussion versus the ways they implement new strategies learned during professional development workshops. This reliance on personal education is especially relevant for the participants in this particular study as many of them did not participate in a traditional teacher preparation program. If a teacher's personal experiences lead to using their own education as a model for how they facilitate discussion, how will they react to professional development in classroom discussion techniques? Through participation in experiential professional development, will teachers be able to not only construct new knowledge but internalize it in a way that allows them to improve their classroom practice?

Finally, I observe how teachers facilitate discussion after receiving professional development in specific pedagogical techniques. There is a need to identify effective discussion techniques that can be scaffolded across elementary and secondary grade levels to provide students with the appropriate skills necessary to engage in classroom conversations (Libresco, 2018) and critical dialogue (Mitra et al., 2017). Using the frameworks of intimate scholarship and grounded theory outlined above to collect and analyze data (Hamilton et al., 2016; Glaser & Strauss, 1967; Strom et al., 2018; Wertz et al., 2011), this qualitative study aims to build a substantive theory that helps teacher educators better understand why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot.

To explore these questions, over the course of a year, I worked with elementary classroom teachers to deconstruct their preexisting beliefs about a pedagogical technique (in this case, the use of discussion and critical dialogue as an instructional strategy during social studies

in the elementary classroom). I provided professional development for teachers, conducted interviews and observations, and made reflections about not only how teachers learn but how they choose to implement new teaching strategies.

Participants

This study took place at a mid-size private Christian school district in a large city in the South for grades PK-12. This private school district includes two PK-8 schools, one to serve the northern section of the metro area and one to serve the southern area. Both of these two schools feed into one centrally located high school serving grades 9-12. This site provided an ideal location because although not all faculty members elected to participate in the study, all upper elementary faculty members across the district were required to attend the inservice sessions. This provided a significant size group (around 16 teachers) for facilitating discussion as part of the professional development experiences.

Recruitment

All full-time elementary teachers from both the north and south campuses were invited to participate in the study via a school-wide email, and, using criterion sampling (Creswell, 2012), four teachers were selected to participate in the study. Participating in the study is different from simply participating in the professional development offered by the school as study participants were also required to complete interviews about their experiences and teach lessons using the new strategies which I observed.

Self as a Participant

In response to the methodology of intimate scholarship, in addition to the faculty members who elected to participate in the study (outlined below), I also consider myself a participant of the study. Because of this, outlining the role I play at the school and the relationships I have with the participants is crucial to contextualizing the findings of this study.

Currently, at the private school where the study takes place, I serve as the Director of Educational Development. In this role, I am responsible for developing and implementing a comprehensive teacher training plan that includes new teacher onboarding, annual teacher inservice, the organization of teacher mentoring relationships, and facilitating teacher participation in external professional development opportunities. I have the opportunity to coach teachers one-on-one and work with them to develop individualized professional development plans as a de facto instructional coach, though this is not part of my official title. Outside of this role, it is unlikely I would have the ability to engage in sustained professional development with the faculty member participants. Many of the interactions included here (like presenting at inservice and conducting classroom observations) are already part of the job responsibilities I have at the school. Additionally, I serve on the school's curriculum committee and am responsible for overseeing implementation of the elementary school curriculum. As a result, I am personally familiar with the curriculum the faculty member participants are required to teach and am able to weave real-life curricular examples into the professional development I provide.

Prior to moving into this position, I was an elementary teacher at the south campus of the school for three years. This experience affords me additional experience with the elementary school curriculum but also speaks to the nature of the relationships I have with the faculty member participants at the south campus. Because the three of the four study participants were also teachers for at least a portion of the time I taught, in the same or adjacent grades at the same campus, we participated together as peers in staff development, recess breaks, and "faculty fun nights."

As a result of these two roles, both current and prior, I have a close relationship with the south campus faculty participants in the study in which they view me as not only a peer and an expert in the field but also as a friend. I entered into the study with this perception of my relationship with the participants, but it was further reinforced in one of my final interviews when a faculty member participant said, "We see you as a peer... we know you have authority now, but you're still one of us." While not part of the official study, I also have access to information about the ways these faculty member participants engage in their profession beyond what would be immediately known to an outside researcher. Many teachers in the school, faculty member study participants included, often visit me in my office, take a seat on the couch, and ask for advice about all aspects of teaching – including events both in and outside the scope of this study.

These roles combine to position me as a contributor to the events analyzed in the study in ways that move beyond the normal constraints and boundaries of a researcher. While it is true that I acted as the primary investigator and was responsible for the design of the study, collection of data, analysis, and reporting of findings, I also recognize myself as an element that both influences and limits the outcome and findings of this research study. My personal and professional history with the faculty member participants alongside my values and beliefs about teaching and learning inform the meaning-making process throughout this study.

However, despite my recognition of myself as a participant, when I refer to participants throughout the study, I will be referring only to the faculty member participants described below unless otherwise noted. Additionally, throughout the findings of this study, although I will provide detailed accounts of the data collected through observations and interviews for each of the faculty member participants, any analysis of my actions will be woven throughout these

accounts as my actions are primarily relevant to this study as they relate to my interactions with the other participants.

Faculty Member Participants

Mrs. Trista Rehbein teaches a combined class of 16 fourth and fifth grade students at the south campus. She earned her bachelor's degree in English/Music from a small liberal arts college, and a portion of her coursework focused on music education. Trista has a total of 13 years of classroom experience across all grade levels, including six years teaching music-related courses and seven years teaching elementary school. She also served as an elementary school principal for a short period of time. Trista was eager to participate in the study primarily because she enjoys learning new things and improving her teaching craft.

Mrs. Bonnie Clark teaches a fourth-grade class with 16 students at the north campus. She earned her undergraduate degree in Elementary Education from a large public university in the South and is currently pursuing her MS in Christian Education online. She has taught upper elementary students, fourth through sixth grades, for a total of ten years. Bonnie was the most reluctant participant, responding after the final announcement, agreeing to participate "if you still really need more teachers."

Mrs. Sabrina Robbins teaches a third-grade class with eleven students at the south campus. She earned her bachelor's degree in Christian Ministry from a local regional school that offers night classes while working full time. Most of her education training has been provided by her current school where she has taught third grade for six years. Like Trista, Sabrina was also eager to participate in the study. She consistently seeks out professional development opportunities that will help her grow as an educator.

Mrs. Faye Wheeler teaches a second-grade class with ten students at the south campus. She earned her bachelor's degree in Nursing. After enrolling her own children as students at this local private school for several years, she decided to pursue a career teaching there. After teaching first grade for two years, Faye is now in her second year of teaching second grade. Although she has considered returning to school to earn a MAT for several years, she has yet to take this step. While Trista and Sabrina both signed up to participate in the study immediately, Faye responded after the second announcement. She seemed interested but less convinced the topic of discussion is useful in her second-grade class.

Overview of Planned Study Sequence

After an initial semi-structured interview deconstructing their personal experiences with discussion, teachers in the study participated in professional development during the school's regularly scheduled inservice sessions about facilitating discussion in the elementary school classroom. Following a check-in about the PD experience, teachers planned and taught a lesson using the discussion strategy introduced during the professional development. I observed the enactment of each of these lessons. Following each observation, teachers completed a reflection about their experience implementing the technique. After this entire process was completed, I planned the next professional development session, building on what was previously taught and incorporating new information based on feedback from the teachers involved in the study. This iterative process was completed three times, after which teachers were asked to complete a second semi-structured interview where they revisited their feelings and thoughts about discussion. This study sequence is detailed below in Figure 3.1.

Figure 3.1 Overview of Study Sequence

- Initial Semi-structured Interview
 - 1. Professional Development
 - 3. Reflection
- 2. Observation
- Post Semi-structured Interview

Note. The study sequence consisted of three distinct stages: 1) an initial interview, where participants detailed their previous experiences with discussion through a semi-structured interview, 2) three iterative professional development cycles, and 3) another semi-structured interview revisiting discussion experiences.

Instruments

After determining *what* information I wanted to collect during each stage of the study, I then moved to determining *how* to collect that information. Miles et al. (2014) suggest if you know what information you are trying to capture, there is no reason that you should not plan how to collect that information in advance. As a result, to conduct the study, I created three different instruments. These include interview protocols, professional development sessions, and observation protocols.

Interview Protocols

For this study, I developed four different interview protocols. The first was for an initial semi-structured interview (Appendix A), designed to deconstruct teachers' beliefs about discussion, its role in the classroom, and their experiences using or learning to use discussion as part of their education in the past. The second interview protocol (Appendix B) was used after teachers participated in a professional development session. It focused on how that learning experience was the same or different from previous experiences as well as how equipped they felt to implement the new strategy they learned during the professional development session. The third interview protocol (Appendix C) was designed to help teachers reflect on the experience of teaching using the new discussion based teaching strategy after their classroom observation. The final interview protocol (Appendix D) was created to guide a semi-structured interview at the conclusion of the study. Many of the questions included in this final interview mimicked the initial interview, looking for ways teachers' beliefs may or may not have changed over the course of the study.

Professional Development Sessions

Within a public school context teachers are required by the state to complete specific professional development requirements, but in a private school setting there are no similar mandates. As a result, I had the freedom to intentionally design each professional development session included as an instrument to conduct this study without the necessity of considering outside constraints. In each session, I started by presenting research-based definitions and examples of the topics that would be covered, followed by an introduction of the new discussion strategy. The strategies included philosophical chairs, pyramid discussions, and the fishbowl. Accompanying these strategies were important things to consider when creating a classroom environment conducive to discussion, like asking authentic questions, creating a safe space,

scaffolding thinking skills, and considering multiple perspectives. After the introduction, as a group, we modeled the strategy using a text from the school's curriculum that participants were familiar with. In this way, participants were able to engage in an experience using the discussion strategy rather than just hearing about how to implement it. At the end of the session, we deconstructed the activity and talked about ways to implement it in specific grade levels. Following the session, I provided each of the faculty member study participants with a journal article to read that supported the strategy presented. In Appendix E, I provide an outline of each professional development session and accompanying readings, and a more detailed description of each professional development session is provided in the data collection section below.

Classroom Observation Protocol

Based on Hess's (2004) description of characteristics of an effective discussion, I developed an observation protocol for classroom observation to look for key markers of an effective discussion, provided in Appendix F. As this study investigates how teachers learn new information in ways that impact their classroom practice, this protocol focused specifically on teacher behaviors during the observation. I used this protocol to make field notes during each observation.

Data Collection and Sources

In the study, using the instruments described above, I analyze data from multiple sources, including interviews, observations, and analytic memos, each collected in distinct ways. The primary data source is interview data. Throughout the course of the study, ideally, each participant would complete a total of eight recorded interviews: an initial interview, a follow up interview after each professional development session, a reflection interview after each observation, and a post-interview. In actuality, three teachers participated in a total of seven

recorded interviews (reasons detailed below), and one teacher, Bonnie, opted out of the study following the first professional development session after completing only the initial interview. However, as a teacher at the school, she was still required to participate in all professional development sessions. At the conclusion of all three professional development sessions, she agreed to complete a post-interview as well. All interviews were audio-recorded and transcribed word-for-word. Although Stake (1995) suggests capturing the key meaning is more important than having an exact record of what is said, having verbatim transcripts to look back at and consider is crucial considering the extended time over which this study took place. Following the completion of all data collection, interviews were used to look for emerging themes across the data.

The secondary data source was collected via observation. Following the presentation of each inservice session, I watched recordings of the session and took field notes based on my observations. Additionally, after presenting each professional development session, I visited classrooms to watch teachers implementing the new discussion strategy. During each of these observations I took field notes then coded these notes to look for categories related to the ways teachers learn new strategies/how they implement new strategies.

Throughout the study, I also used analytic memos to record initial impressions of interviews, professional development sessions, observations. In the following section, I provide more details surrounding the process for data collection for each of these three avenues.

Initial Interviews

To investigate the ways in which teachers describe and explain their personal experiences with classroom discussions, I utilized personal, semi-structured interviews. Before engaging in any professional development sessions (detailed below), participating teachers were asked to

conduct an interview with me, attempting to deconstruct their experiences with classroom discussion both as students and as teachers. These interviews took place in various locations, including my office at the school, the main office, or in the teacher's own classroom. In the initial interview, I asked questions centered around the participants' general feelings about discussion, about their discussion experiences in K-12 schooling as well as during college, about discussion experiences outside of formal education, and what discussion looks like as part of their classroom practice. A full list of questions is provided in Appendix A. The four interviews varied in length from around 30 minutes to around 75 minutes depending on the participants' responses and willingness to engage in conversation about the questions. I gave all participants the opportunity to volunteer any additional information they felt may be relevant to the study beyond the questions I had planned to ask, and all interviewees were informed that they could pass on any questions. I recorded and fully transcribed all interviews.

Professional Development Sessions

Following this initial interview, at the quarterly inservice sessions for the school year, all upper elementary teachers at the private school involved in this study received professional development in research-based practices for engaging in authentic discussion or critical dialogue through the use of discussion based teaching strategies with young children. Each session focused on how to effectively use a specific discussion technique that valued student voice in the elementary classroom. All three professional development sessions were planned and facilitated by me. These sessions were iterative in nature, developed after my initial interviews to ensure they were useful for a majority of teachers participating in the study, and modified as necessary following each session based on feedback from study participants (n= 3). Generally, these

sessions included all third through fifth-grade teachers at the school, the total number of which varied between 16-17 teachers.

Session One: Philosophical Chairs Discussions. The first professional development session (Appendix G) took place in person in a classroom on campus. Sixteen teachers were present, including the (at that time) four study participants. As part of the session, teachers were asked to engage in a philosophical chairs discussion (Gonzalez, 2015) surrounding the book *The Hiding Place* (Ten Boom, 1974). This book was chosen because it is part of the school's fifthgrade curriculum and because all teachers were asked to read the book over the summer as part of the school's professional development plan. As part of the session focused on asking authentic questions, the philosophical chair discussion centered around the question "Was it right for Corrie Ten Boom to steal ration cards for the Jews?" This session was recorded as part of the school's regular inservice practices. Professional development sessions were not transcribed. As the presenter for this session, I was unable to record observations during the session. Following the professional development, I watched the recording and took observation notes using the included observation protocol (Appendix F).

Session Two: Pyramid Discussions. Due to CDC-recommended Covid-19 protocols, I was quarantined during the school's second inservice session. As a result, the second professional development session (Appendix H) took place via zoom. Again, sixteen teachers were present including the (now reduced) three study participants. As part of the session, teachers were asked to engage in a pyramid discussion (Gonzalez, 2015) surrounding the burning of Rome using books and resources provided to teachers as part of the school's curriculum. This topic was chosen because, again, it is material participants are asked to teach, and because the passages were short enough to read during the session. As part of the professional development focused on

scaffolding, the sample pyramid discussion questions modeled movement from basic fact-based questions to questions that required deeper thought (Table 3.1). Demonstration of this movement exemplified Callahan et al.'s (2016) suggestion that teachers "need stronger support in creating opportunities for students to substantively discuss ideas" (p. 239), possibly through helping teachers develop the skills necessary to create a script of questions that move from lower to more sophisticated levels of thinking. Teachers were then asked to participate in a pyramid discussion utilizing questions about the strategies presented during the professional development session (Table 3.2). Again, this session was recorded as part of the school's regular inservice practices but not transcribed. As the presenter for this online session, it was especially difficult to gauge participants' reactions and engagement levels during the session. Following the professional development, I watched the recording and took observation notes using the included observation protocol (Appendix F).

Table 3.1

Sample Student Questions for Pyramid Discussion (Gonzalez, 2015)

Student Questions

- 1: Who does this author suggest set the fire? Who did the other author suggest? Are there any other options?
- 2: How is this account of history the same or different from what we read yesterday? Look for key similarities or differences and highlight them.
- 3: How do we know which one is true? Can you find any evidence that makes us think one is more or less true than the other?
- 4: Why might the author choose not to include that some people think Nero set the fire?

Table 3.2

Professional Development Questions for Pyramid Discussion (Gonzalez, 2015)

Professional Development Questions

- 1: Which scaffolding strategies did you notice during this sample lesson? Which scaffolding strategies have you used in your classroom? Provide examples.
- 2: What are some topics that you teach in your classroom where additional sources could be added to present multiple perspectives? Brainstorm ideas.
- 3: What difficulties do you expect to encounter when using pyramid discussions? What are some benefits?
- 4: In what ways do these three ideas (scaffolding, multiple perspectives, and pyramid discussions) complement each other? Do you feel equipped to engage in any or all of them?

Session Three: Fishbowl Discussions. The third professional development session (Appendix I) took place in person in a classroom on campus. Seventeen teachers were present, including the three study participants. As part of the session, teachers were asked to engage in a fishbowl discussion (Gonzalez, 2015) centering on ideas of conformity. Each teacher was "required" to participate in the fishbowl at least once, and all seventeen teachers did participate. The initial question for this discussion was chosen because it is part of a pre-reading activity included in a literature guide for the book *The Tale of Despereaux* (DeCamillo, 2015). This literature guide is provided to teachers as part of the school's third-grade curriculum. While teachers were not asked to read this book, fourteen of seventeen teachers noted that they had read this book in the past. The initial question in the literature guide asked, "What does it mean to conform?" Using this question as a starting point provided a nice connection with the first session where we discussed asking authentic questions, and I modeled building out a question

sequence for the discussion using the guidelines provided in the second session about scaffolding. These questions are included in Table 3.3.

Table 3.3

Sample Student Questions for Fishbowl Discussion (Gonzalez, 2015)

4: With that in mind, how should Christians think about conforming?

1: What does it mean to conform? 2: Think about the literature you have read this year. When is "conforming" necessary or unnecessary in the lives of people you've read about? 3: Romans 12:12 tells us "Do not be conformed to this world, but be transformed by the renewal of your mind." What do you think this verse means?

During this session, I also addressed ways of assessing discussions. While assessment was not specifically included in the initial outline of sessions (Appendix E), questions about assessment came up during the first session and, to honor the teachers present and model sound teaching strategy, I included this topic of teacher interest in the final professional development session. We first discussed the varying goals of discussion and why we would choose to (or choose not to) assess discussions. As discussions frequently have different goals, they merit different types of assessments—the teacher's intention in facilitating a classroom discussion should directly impact the way it is assessed. As part of this session, I shared various ways of assessing discussions. Teachers can use formative assessments, like exit tickets, to gauge student

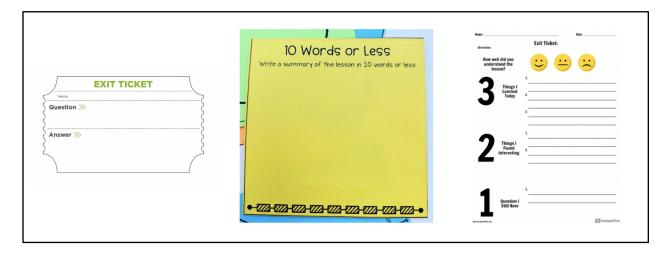
understanding and iteratively plan future instruction (Figure 3.2). Teachers can also use

summative assessments. When discussion focuses on review or mastery and may include taking

notes during the discussion or writing an essay afterwards, those written items can be evaluated for understanding (see Figure 3.3). Teachers can also assess discussions for participation through a rubric, by keeping track of how and when students participate in a diagram, or by allowing students to evaluate their own participation (see Figure 3.4).

Figure 3.2

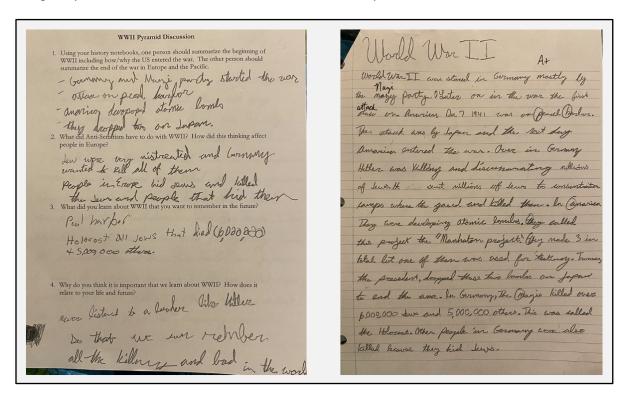
Exit Ticket Examples



Note. Three examples of exit tickets shared with teachers during professional development session three.

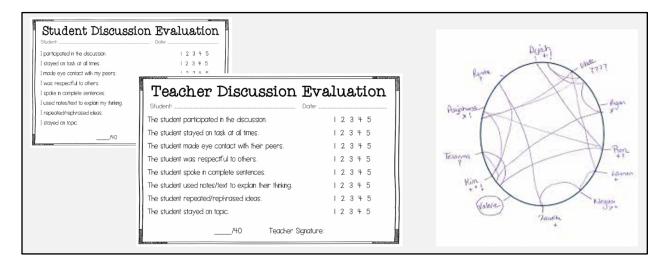
Figure 3.3

Sample Pyramid Discussion Notes and Assessment Essay



Note. Example of notes taken during a pyramid discussion in Trista's class and an essay written from these notes used as a discussion assessment. These documents were shared with teachers during professional development session three.

Figure 3.4
Sample Teacher Evaluation Options

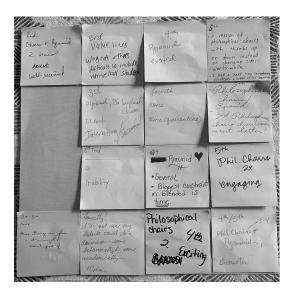


Note. Two examples for assessing discussions based on participation shared with teachers during the professional development session three.

This session was not recorded, but teachers were asked to complete an entrance and exit ticket. On the entrance ticket (Figure 3.5), teachers were asked to share their grade level, which strategies they had tried and how many times, and one word that expressed how they were feeling about the strategies they had been introduced to so far. On the exit ticket (Figure 3.6), teachers were asked to share one thing they learned in today's session that they will use in their classroom before the end of the year. Following the professional development, I spent ten minutes recording my thoughts about the session as part of my field notes.

Figure 3.5

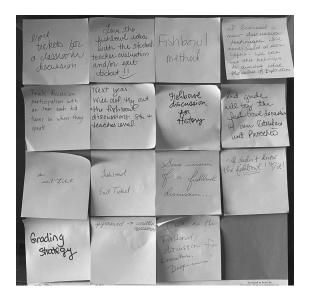
Entrance Tickets from Professional Development Session 3



Note. Photograph of entrance tickets completed during professional development session three indicating whether teachers had attempted discussion based teaching strategies.

Figure 3.6

Exit Tickets from Professional Development Session 3



Note. Photograph of exit tickets completed during professional development session three showing one thing teachers will implement before the end of the academic year.

Follow-up Interviews After Professional Development Sessions

I utilized a series of short semi-structured follow up interviews after each professional development session, individually with each participant. These interviews were fully recorded and fully transcribed by myself. While ideally, I hoped these would take place in person within a week of each professional development session, due to ice, snow, or Covid- related quarantines, that was not always the case. After the first session, due to an unprecedented October ice storm, I was unable to complete follow-up interviews at all, although I did record analytic memos based on my personal interactions with each participant after the first professional development session.

After the second professional development session, I was able to complete these interviews within a week, although one was conducted via zoom rather than in person due to Covid quarantines. After the third professional development session, I was again able to complete these interviews within a week, all in person. These six interviews followed a semi-structured interview protocol and varied in length from 7 minutes to around 15 minutes depending on the participants' responses and willingness to engage in conversation about the questions. The questions for this interview centered around the participant's responses to the professional development session and the ways in which they will choose to utilize the strategies in classroom practice. A full list of questions is provided in Appendix B. During this interview, I gave all participants the opportunity to ask questions about facilitating discussion in their classrooms in advance of their classroom observation. It is important to note that although participants rarely chose to ask questions about facilitating discussion during this interview, two of the three participants frequently sought out opportunities to discuss implementing the strategy

or developing questions outside of recorded interactions, like via text or during lunch. A record of these interactions is recorded in my analytic memos.

Classroom Observations

To provide data for my final supporting question dealing with the ways in which teachers facilitate discussion after engaging in professional development about a specific technique, I utilized classroom observations. In direct contrast to personal interviews, classroom observations take place in the natural settings where learning and teaching occur. These firsthand encounters are essential in triangulating emerging findings, and they also provide context and real-world examples that may be discussed in follow-up interviews and reflections (Merriam & Tisdell, 2016). Following each inservice session, participating teachers were asked to teach at least one thirty-minute social studies lesson using the discussion method highlighted in the professional development during which I observed. In actuality, these observations ranged in length from 18 minutes to 65 minutes. The varying length of the lessons was largely dependent on the grade level in which the observation took place. For all nine observations, when a teacher let me know when they would like to conduct their observation, I prioritized this and worked within their schedule, attempting to make sure I was able to observe a lesson that was their "first choice" to use for enacting the strategy.

For the observation itself, teachers were given autonomy to choose the topics they wished to cover during the lessons, develop questions, and arrange their classrooms in the way they thought would work best. However, on more than one occasion, two of the three participants I observed came to me for help developing questions. This happened in my office, in the main school office, via text, or even during our lunch period surrounded by students. In addition to my role facilitating the professional development sessions, this is another way I see myself as a

participant in the study, a co-constructor of knowledge, providing scaffolding for faculty member participants attempting to make connections between the strategy they learned during inservice and their classroom practice.

Using the classroom observation protocol I developed (Appendix F), I made field notes during each observation. While I did my best to stay silent and not disrupt the learning process during observations, students were still very aware of my presence. In Sabrina and Faye's classrooms (second and third grade), students frequently stared at me or made silly motions when they knew the camera was watching. In Trista's classroom (fourth and fifth grade), students largely ignored me, but at the end of the first observation (philosophical chairs), a group of students that I know well asked me "Who won?" This comment indicates that they were very aware they were being watched. All observations were recorded but not transcribed. Once data collection was complete, I watched these videos again to look for relevant actions I may have missed initially.

Interviews After Classroom Observations

To add to the completeness of these interviews and the reliability of the data, I also planned to ask each teacher included in the study to record their answers to an open-ended reflection, either in writing or verbally, and send them to me after they enacted the lesson I observed. This reflection would have required each teacher to respond to a brief series of open-ended prompts about how the lesson they taught using the prescribed discussion method went that week. However, after the first classroom observation, the first teacher I observed came to me seeking feedback and wishing to deconstruct the experience together. This request speaks to the relationship I have with the participants outlined above and provides an additional example of how I engaged in the study as a participant alongside faculty members. As a result of this

request, this portion of the study moved from a written or verbal reflection done independently by the participants to an additional semi-structured interview done in tandem with me.

In retrospect, I think this change impacted the findings of the study in a positive, significant way as it gave me the opportunity to ask questions beyond those included in the initial follow up interview after each professional development session. While the included protocol (Appendix C) served as a starting point for these conversations, I was also able to look over field notes from the observations and ask specific questions about what teachers were thinking in the moment. Since the overarching goal of the study was to consider how teachers learn and internalize new information about teaching in ways that impact their classroom practice, having the opportunity to question teachers' thinking processes provided valuable insight. For example, immediately following an observation and before turning off the recording, Sabrina turned to me and said, "I thought that was productive." In our follow-up interview, I was able to return to that statement and have her elaborate on her meaning. In another instance, while observing Trista, I noticed a visible shift in the way she was leading the discussion. Midway through a discussion using the philosophical chairs strategy, she asked students to change sides. This was not an expectation she set at the beginning of the class period, and it was different from what was modeled during inservice. During our follow-up interview, I was able to ask her to explain why she chose to shift directions. This would not have been possible if I had followed the initial plan to complete reflections independently, and it provides an additional level of data to discuss in the findings portion of this study.

Ideally, these follow-up interviews were done as soon as possible after the lesson was enacted; however, that did not always prove to be the case. For two participants, shortly after their first in-class observations were completed, the entire campus was sent home for virtual

school for the remainder of the fall semester due to a significant uptick in Covid cases among students and teachers. As a result, those two interviews happened after an extended winter break. It is likely the answers were significantly skewed as a result of this timing. However, interviews following the second and third observations were conducted within a week of the observation taking place. These interviews generally took place in my office or in the teacher's own classroom, lasted anywhere from 7 to 15 minutes, and were fully transcribed by me.

Post Interviews

At the conclusion of three iterative cycles of professional development, I conducted a post interview (Appendix D) with the three remaining participants. Using many of the same questions included in the initial interview protocol, I asked participants the same or similar questions with the intention of comparing their answers from the beginning of the study to their answers at the conclusion of the study. Additionally, for each participant, I looked at their initial interview transcript, notes from my professional development sessions, and field notes collected during classroom observations to write specific questions based on not only their initial responses but always the ways they interacted with new information during the study with the goal of locating specific instances where their beliefs about classroom discussion had changed. These three interviews varied in length from 15 minutes to 40 minutes depending on the participants' responses and willingness to engage in conversation about the questions. I gave all participants the opportunity to volunteer any additional information they felt may be relevant to the study beyond the questions I initially asked, and all interviewees were informed that they could pass on any questions. The interviews were fully recorded and fully transcribed by myself.

In addition to the three study participants that I observed throughout the semester, I also conducted a post interview with Bonnie, the fourth participant who opted out of the study after

the first professional development session. Although I did not have a chance to observe her implementing any of the techniques introduced during the professional development session, she was present at all three professional development sessions. Having her complete a post-interview provided some insight that directly relates to the research question "Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?" Particularly, during the post-interview, she mentioned that while part of the reason she chose not to participate in observations during the study was due to additional covid-related stress specific to this school year, she also did not feel fully confident implementing the material taught. Specifically, Bonnie shared that when I requested time to observe in her classroom, she would look at her lesson plans and feel like she could not come up with a single question to use for discussion during the weeks I emailed her. In her opinion, it felt easier to opt out of the study than to try to work through that struggle. As a north campus teacher, Bonnie is one of the participants I see less frequently because my primary office is located at the south campus, and we have never worked directly together as peers. When I shared that many of the teachers came to me with their lesson plans and we worked together to draft questions, she was surprised. In retrospect, it makes sense that Bonnie would not reach out to me in that way because the relationship I have with teachers at the north campus is less intimate than the one I have with teachers at the south campus. In my findings and discussion, I will address this particular case in more detail, but although the data collected from Bonnie's experience within the study is not "complete", when coupled with the experiences of the other participants, her response of not implementing any of the strategies taught has strong implications for the primary research question.

Analytic Memos

Immediately following each session outlined above, including interviews, professional development sessions, and observations, I created analytic memos in an effort to capture key ideas. While fairly brief – most memos were around half a page – these not only helped inform professional development sessions and interview questions; they also helped me keep a detailed account of what I was thinking at the moment. Because using grounded theory as my methodology requires that I wait to look at any data until all data has been collected, these memos are an integral part of the data as a record of my initial thoughts, and they were used to find themes and connections that may have otherwise been missed.

A summary of all data collected is included in Appendix J.

Data Analysis

Data analysis is a continual process of making meaning (Miles et al., 2014). The goal of data analysis is to explore possible answers to the research question. It requires the development of categories and themes based on the systematic evaluation of data. Using this data, the researcher will compile findings or answers to the research question. Gathering data through multiple sources, like multiple interviews and classroom observations, allows for triangulation when data is compared to ensure validity and reliability (Merriam & Tisdell, 2016).

Grounded Theory

Throughout the data analysis process, I utilized a common approach to qualitative research by "inductively building from particulars to general themes" (Creswell, 2009, p.4).

More specifically, I relied on grounded theory analysis. The primary purpose of utilizing grounded theory is to derive a theory from observations. As is reflected in the methods of data analysis below, grounded theory analysis builds on traditional approaches to qualitative research,

using "a series of cumulative coding cycles and reflective analytic memoing to develop major categories for theory generation" (Miles et al., 2014, p. 8). The results frequently produce new knowledge, or a new theory, that is "grounded" in the data collected (Merriam & Tisdell, 2016).

Methods of Data Analysis

To start the data analysis process, after the second iteration of the professional development/observation/reflection cycle, I began to look at my data. Following Miles et al.'s (2014) definition of matrices (a chart displaying the intersection of two lists set up as rows and columns), I created a matrix including a list of study participants and professional development sessions to use as a guide when beginning to analyze the data collected (See Table 3.4).

Table 3.4.Vertical Study Participant Matrix

	Mrs. Trista Rehbein	Mrs. Sabrina Robbins	Mrs. Faye Wheeler
Professional Development #1: Authentic Questions and Philosophical Chairs			
Professional Development #2: Scaffolding, Multiple Perspectives and Pyramid Discussions			
Professional Development #3: Encouraging Participation and the Fishbowl		•	•

Looking at each participant individually, one set of data at a time, I read through data collected during the first and second professional development cycles chronologically to conduct an initial coding cycle. During each cycle, I looked for initial descriptive themes that stood out among the data, assigned them colors, then, using highlighters, physically coded the data using the assigned

color codes. This process aligns with Glaser and Strauss's (1967) description of initial data analysis when conducting grounded theory analysis. They suggest "allowing substantive concepts and hypotheses to emerge first, on their own" (p. 34). After each initial read-through, I also met with my advisor and engaged in conversation around the emerging themes. These initial categories are included in Table 3.5 and discussed in more detail in Chapter Four. After finding these initial themes, I read through each participant's data set again to find additional examples of the theme I may have missed during the first read.

Table 3.5.

Overview of Initial Themes

	Mrs. Trista Rehbein	Mrs. Sabrina Robbins	Mrs. Faye Wheeler
Professional Development #1: Authentic Questions and Philosophical Chairs	Excitement; Desire to improve; Integration of old and new practices	Being the best student; Lack of experience/preparedness	Hesitant to fully buy in; Imitation
Professional Development #2: Scaffolding, Multiple Perspectives and Pyramid Discussions	Support; Agency	Seeks help; Controlling but has no control	Needs to feel prepared; Doing it the right way
Professional Development #3: Encouraging Participation and the Fishbowl	Seeks help	Doing it the right way	Integration of old and new practices

After constructing these initial themes, I completed the third professional development/observation/reflection cycle with each of the three remaining participants. Using the codes developed from data analysis of the first two cycles and the same colored highlighters, I looked through my field notes to look for continued examples of the themes that had previously emerged.

After finding these initial themes for each participant, I fully transcribed all interviews for each teacher, including initial and post-interviews. Working through each teacher's transcribed data individually, I intentionally looked for examples of these initial themes and color coded them while also looking for new codes. An example of this coding is provided in Figure 3.7.

Figure 3.7
Sample of Coding Process

Okay. So the first set of questions is about the lesson that you taught last Friday with a fishbowl and how that went. So what is your reaction to teaching that lesson? Yeah, I think, I mean, I think we all learned a lot doing it, so I'm really not sad about how it went, because I think for them to make the mistakes actually was even better than me like trying to warn them, like, don't do this or don't do this, or try to think of every wrong thing they could do. So I think, I mean, it's a challenge for me not to input myself and try to keep things moving, you know? So one thing I wanted to, what I want to work on with classes in the future, I probably don't have time to do this much with this class is to help them think of ways to keep a discussion going, rather than just coming up with their own idea. So to take what someone has said, and then piggyback off that idea or ask a question about that idea. And I don't know if they're, they may not be quite there, like that is sort of a deeper level thinking, but some of them probably, so that's a goal that I have. So it was, yeah, I don't know. I thought it was pretty good. I thought it was really good. I love... It was so hard for me to watch it first because I was like, it's going to be, I like, I know it's going to be fine. I know. But sometimes it's hard to, like you said, let them make those mistakes. And I thought the way that you handled it was really well done and like showed a lot of patience, but also like, thought like about it. It was intentional. So why did you choose to use this strategy with the content that you did? Trista: Oh, well, I liked how it worked at staff meeting. I thought that was just really easy and I really felt like that question... I mean, for me, as I was doing it in staff meeting, I felt like that brought up all of our fifth grade books and our history. And I thought, oh, this is the perfect way to synthesize our whole year. So before you had come in, we had gone through our history notebooks and reviewed all the things that we had learned in history. And then we went through and summarized each of the books, everybody took turns summarizing. And so it was a great like synthesis. And I think it did - it accomplished that in the end getting them to really think through, and I was actually super impressed with how well they remembered details about the books and So in what ways did it go as you expected and or how did it surprise you. The lesson in general, but also maybe comments from students or just what, what played out?

Note. Example of interview transcript with color coding that aligns with initial themes.

Then, transitioning from vertical analysis to horizontal analysis, I engaged in the constant comparative method to look for common themes among participants and consider if and how each particular theme might be refined into a more abstractly defined category. A category is a conceptual element of a theory, while a theme is a conceptual aspect or element of a category

(Glaser & Strauss, 1967). Both categories and themes are indicated by the data, and, for this particular study, I include only categories and themes I have constructed based on the data collected. Armed with this data, I used Miles et al.'s (2014) definition of a construct table (a table which includes data that highlights the variable properties of overarching categories) to organize defining examples of each category. The initial development of a construct table allowed me to integrate categories and themes concisely and coherently for analysis and also left space to include examples later in the analysis process when delimiting the theory.

Next, reading through the data twice to note instances that reflected the codes already identified, I looked for areas of conflict, reflected on the data, and recorded additional analytic memos to help me make sense of the data (Glaser & Strauss, 1967). Throughout the coding process, I continually solidified my theory by reducing overall categories and adding detailed examples of each category to the construct table.

As categories became clearer and were solidified, a potential theory emerged. After writing in depth narratives of each category, I examined how they fit together. In looking deeply at the data and considering how each category could be seen as a factor providing insight about how teachers learn good technique and good theory as evidenced by implementation or integration into their practice, the theory of Embodied Knowing in Teacher Education emerged. Once this theory was fully formed, I read through and updated both my findings and my discussion to provide additional information that helps clarify the theory for readers.

Throughout the data analysis process, as much as possible, I attempted to ignore the existing literature of theory and fact about knowledge construction, the effectiveness of teacher education programs for preservice teachers, and professional development for inservice teachers so it would not influence my themes or categories (Glaser & Strauss, 1967). However, in Chapter

Five, I look to existing theories of constructing knowledge and effective professional development to ascertain how existing theory can be laid over the data collected, or if existing theory helps to generate new substantive theories (Glaser & Strauss, 1967). In this study, while existing theories are referential to the theory established, none fully encompassed the findings. The conclusions that emerge in chapter five are based on what I was able to systematically discern about the data through the analysis process outlined here.

Epistemological Assumptions

As a constructionist, I think personal knowledge is constructed through our interaction with our environment rather than discovered. It is defined as "truth or meaning" that "comes into existence in and out of our engagement with the realities in our world" (Crotty, 1998, p. 8). As a result, I believe that every teacher enters the classroom with a distinct and unique view of the world based on their experiences which have an explicit effect on their teaching practices and techniques. I feel teachers should be equipped with the skills necessary to facilitate classroom discussion and that students should be involved in the construction of meaning through the use of classroom discussion.

Additionally, I believe educators are never neutral. In *Literacy: Reading the Word and the World*, Freire and Macedo (1987) present the idea that neutrality in education does not exist. Instead, every teacher brings their own beliefs and ideologies into the classroom, even if all teachers do not acknowledge that fact (Freire & Macedo, 1987; Vasquez, 2004) and likely even if they strive for pedagogical neutrality. Noddings (1993) defines the idea of teaching with pedagogical neutrality as:

an obligation to present all significant sides of an issue in their full passion and best reasoning. This is not to say that teachers should not disclose their own beliefs and commitments (although sometimes they should not), but that they should always help students see why an issue is controversial. (p. 123).

However, Poirier (2011) asserts:

Not all biases are bad biases... Bad biases are those that one knowingly propagates in order to deceive... However, there are good biases, for example, one's bias in favor of telling the truth and revealing the real. These biases are essential to the advancement of knowledge in all fields of inquiry (p. 220).

Despite efforts to tell the truth and reveal the real, bad biases are still sometimes unknowingly propagated in education, both in pedagogical practice and in content knowledge. Because of this, I believe it is crucial to evaluate the personal knowledge of teachers as they implement pedagogical practices. This study aligns with that goal as it begins with deconstructing teachers' personal experiences with an instructional strategy, in this case, the appearance of discussion in the classroom, before investigating how teachers learn new information about this strategy and attempt to use it in classroom practice.

Trustworthiness

The purpose of the study is not to determine a single truth, but to consider how teachers learn and internalize new information about teaching in ways that impact their classroom practice. Since there will be more than one teacher involved in the study, individual teacher responses will likely vary based on the knowledge and experiences they individually bring to the table. To that end, I will use two strategies to ensure my interpretations are both credible and valid (Merriam & Tisdell, 2016).

First, using the constant-comparative method ensures I do not misunderstand the information shared by participants in their interviews (Merriam & Tisdell, 2016). As I conducted

interviews, I continually checked with participants to be sure I was interpreting their answers correctly. Second, epistemologically, I feel that students should be involved in the construction of meaning through the use of classroom discussion. As a result, I may be inclined to interpret the data more favorably to support my own beliefs about the use of classroom discussion as a best practice for teaching social studies. To mitigate this, I will use reflexivity as a tool to critically reflect on how my own opinions and biases may appear in the research (Merriam & Tisdell, 2016).

In addition to concerns about credibility and validity, a small sample size may raise questions of generalizability and/or transferability. This case study is distinct in that it takes place in a relatively small private school district where I am responsible for facilitating teacher learning experiences and, due to this distinct setting, few other schools are likely to fall into the same set of circumstances. However, fore fronting intimate scholarship as a framework for this study orients the findings in a particular way: namely, that the goal is not in generalizing the findings and applying them to other groups, but in making the findings clear and evident, allowing those who read the study to enter into the personal knowledge generated by the researcher and determine the applicability of the understandings developed to their own work (Hamilton et al., 2016). Given this, I will try to include in-depth, rich descriptions of the data collected and analyzed so that readers can evaluate whether the results are transferable to their own contexts (Merriam & Tisdell, 2016). In developing these rich descriptions, this work has the potential to provide new knowledge in the conversation on teaching and teacher education, inform the personal practical knowledge of the reader, and shape teacher education in local contexts.

One notable method of ensuring trustworthiness intentionally excluded from this study is the use of member checking during the analytic process. Because both I and the participants worked together in a professional capacity before this study and will continue to work together after the conclusion of the study, and because the nature of this study includes honest observations about the experiences and practices of the participants, member checking becomes a complicated and messy process. As a result, in order to be able to remain unbiased in my observations in work that is deeply embedded in relationships I have, I chose not to engage in member checking. Further, asking participants to be involved in this way moves them from voluntary space, as participants in the study, to evaluative space as co-creators of knowledge, which was not the intention of participation in the study.

Ethical Considerations

As research conducted under the framework of intimate scholarship is highly relational, integrity and ethics are a necessary concern (Hamilton et al., 2016). While I have outlined my role as a participant earlier in this chapter, I think it is important to also outline potential ethical considerations. In my role within the school, I am not a supervisor of the teachers involved; however, I am in a leadership position and provide advice about faculty members to principals. Additionally, I have children who attend the school district. Because of this, I have an uncommon relationship with the participants in that I know many of them in my personal or professional life. This relationship grants me access to a community that may be untrusting of outsiders. Additionally, it also means that I have an insider's perspective of how the school operates and the culture which is developed and encouraged throughout the school community. However, while I feel that I can be objective as I investigate the question, I am always aware that

the participants I am observing and interviewing are part of my personal and professional life and have feelings that should be considered as well.

Because one aspect of my job in the district is providing professional development to teachers and making curriculum recommendations, the professional development provided to elementary teachers was designed and presented by me. This has ethical implications because I provided the professional development that I am also evaluating. I need to be aware of how I analyze and write about teachers' experiences and present them accurately, even if that is in a way that is not favorable to me.

Additionally, because I was previously a teacher in this school, some of the students participating in the study may have been my students in a previous year. Potentially, my relationship with these students may affect the way they interact with me or how I interpret their actions and behaviors during my observations. However, my close relationships with students may also strengthen the study because I am familiar with their behaviors and learning styles.

Finally, this study followed all policies and procedures set forth by the University of Oklahoma's Institutional Review Board for the protection of human subjects. Though the study presented no apparent risks to the teachers or students involved in the study, steps were taken to make sure no one was harmed. Each teacher voluntarily completed a consent form before participating in the study. All students who were in the observed classes as well as their parents also completed a consent form. Furthermore, teachers were aware that participation was voluntary, they would not receive compensation for participating, and that they could opt out of the study at any time. This was evidenced by Bonnie's decision to not participate in the classroom observations. Teachers were identified only through pseudonyms in the reporting of this study, and identifiable information was removed from any data collected.

Limitations

Qualitative studies are never perfect, and despite all of these considerations, I faced four major limitations. First, this study took place over most of a school year, starting with the first quarterly inservice professional development session in October. Ideally, the study would have started with the back to school inservice in August. Starting at the beginning of an academic year would have helped set the stage for teachers, providing an expectation of focus on classroom discussion as well as an additional instructional strategy coupled with a round of observations and reflection. Delayed preparation to begin the study along with limitations in the inservice schedule due to Covid prevented this initial session but, in replicating the study a second time, I would attempt to start in August rather than October.

Second, the time devoted to each professional development session was quite short, about 50 minutes, because the session was slotted into the school's regular structure for professional development. At the end of each session, I found myself wishing for a little more time with teachers to fully cover the topics presented. If I were to replicate the study, I would ask for twice as much time for each topic: a full session to engage in practice of the instructional strategy through enacting a model lesson, and a second session devoted to background information, theory, and debriefing the model lesson.

Third, existing long term relationships created complications to member checking. In order to be able to remain unbiased in my observations in work that is deeply embedded in relationships I have, I chose not to engage in member checking. However, I recognize this absence creates a limitation in that I was unable to confirm my interpretations with my participants, and this limitation should be kept in mind when evaluating the transferability of any findings.

Finally, the number of participants in this study was intentionally limited. As I began data analysis, I did wish that more teachers had participated in the study, but I also recognize that each additional participant exponentially increases the researcher workload as each cycle of professional development in the study required three follow up touch points: a follow up debriefing the professional development session, a classroom observation, and a follow up debriefing the lesson that was observed. Scheduling these three touch points during an already challenging year because of normal teacher schedules coupled with covid restrictions and extreme weather was already challenging with three participants and adding any more participants may have been resource prohibitive.

Summary

This study was designed to investigate how teachers construct knowledge in ways that meaningfully impacts their classroom practice. Data collected included multiple recorded interviews that were transcribed, classroom observations that were recorded, student work, field notes, and analytic memos. I used a series of matrices to inductively look at the data collected vertically and horizontally. I holistically compared complete sets of data from each teacher, then looked at data from each professional development/observation/reflection cycle to identify themes that emerged to describe the ways teachers constructed knowledge and implemented it in their classrooms. In the next chapter, I hope to provide rich thematic descriptions of the ways each teacher constructed knowledge by describing their experiences during each cycle of the research study. Finally, while the limited size of this study prevents generalizability on a large scale, I will share implications for school leaders and teacher educators that can be applied to the contexts in which we work to help us better understand how teachers construct personal knowledge as well as how we can reach teachers who construct knowledge in multiple ways.

CHAPTER 4

FINDINGS

In this study, I combine an intimate scholarship framework with grounded theory analysis to examine why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot. More specifically, in the cases outlined here, I consider how teachers learn about and implement new techniques to facilitate authentic discussion and critical dialogue during social studies in the elementary classroom after professional development training. Because the study was rooted in notions of intimate scholarship, my relationships with the faculty participants as well as my values and beliefs about teaching and learning inform the meaning-making process. While this is relevant throughout the study, it is especially apparent throughout this section as themes emerged via coding. The vignettes I employ here to illustrate each theme take into consideration more than just explicit data that emerged from interviews and observations; they also recognize the long history, professionally and personally, that I have with each participant which has helped enhance the ways in which I am able to present their stories accurately and truthfully. Throughout this section, I tell the story of each participant individually to best present a holistic picture of each individual engaging on their own journey to learn new teaching strategies as well as to fully represent the relational and intimate aspect of this study.

The primary purpose of the study was to investigate the question "Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?" Supporting questions included: (1) How do elementary teachers describe and explain their personal experiences with classroom discussion? (2) In what ways do elementary teachers respond to professional development about classroom discussion

strategies? (3) After receiving specific pedagogical training, how do elementary teachers facilitate discussion and/or utilize discussion to facilitate critical dialogue?

In this chapter, I present the results of my data analysis. Using data from all three data sources (interviews, observations, and analytic memos), I used matrices to approach the data systematically and employed techniques associated with grounded theory to allow themes to emerge. Taking each participant as a case, a single row in the matrix, data were examined on an individual basis first, holistically looking across each teacher's interviews, observations, and analytic memos to unearth essential themes that best embodied the participant's ways of constructing knowledge and implementing new knowledge in response to these supporting questions.

To organize this data, I delineate findings for each participant as a single case, highlighting themes and examples unique to each participant's learning experiences and ability to implement. Under each participant heading, after a brief description of the participant, I first share a narrative outlining the ways that particular participant described and explained their experiences with discussion before beginning the study, designed to address the first supporting question. This section is labeled "Before: Personal Experiences with Discussion." Next, in a new section labeled "During: Professional Development and Observations," I share observations and direct quotes designed to address my second and third supporting questions. These observations and quotes outline the ways in which faculty member participants responded to professional development about classroom discussion strategies as well as how they facilitated discussion and are organized by theme. Finally, the last section titled under each participant heading is labeled "After: Post-study Reflections." In this section, I note reflections and observations gathered from a final interview with each participant about discussion experiences in general and throughout

the course of this study as well as their perceptions of the learning experience they participated in as part of this study. This interview allowed teachers to expand on their personal experiences with discussion after the study was concluded, further elaborating on their initial answers to the first supporting question as well as sharing additional information about their responses to the type of learning encountered during the study which provided additional insight into the second supporting question.

In Chapter Five, Discussion, I move these themes into categories which are in conversation with each other, detailing similarities among all participants' ways of constructing knowledge and implementing this new knowledge within the scope of the study and in light of the purpose of the study: understanding more about the ways teachers learn and internalize new information about teaching in ways that impact their classroom practice.

Individual Participant Findings

Trista

Mrs. Trista Rehbein teaches a combined class of 16 fourth and fifth grade students. She earned her bachelor's degree in English/Music from a small liberal arts college where a portion of her coursework focused on music education. Trista has a total of 13 years of classroom experience across all grade levels, including six years teaching music-related courses and seven years teaching elementary school. She also served as an elementary school principal for a short period of time.

Trista was eager to participate in the study primarily because she enjoys learning new things and improving her teaching craft. She would tell you that, but she would not have to. In my tenure at the school, I have seen her volunteer for every professional development opportunity available. Three years ago, she attended a conference about growth mindset and,

upon her return, provided training for the district in growth mindset throughout the year. This year, in addition to the present study, she signed up for an intense course I recommended about teaching hard history. This course met biweekly for several hours, and during our final interview, she was excited to share more about what she learned and how she will implement it in the next academic year. For the next school year, she has already enrolled in an internal certification program offered by the school. These experiences help improve her craft, but also set her apart as an example and mentor for the school at large.

Before: Personal Experiences with Discussion

General Feelings About Discussion. In our initial interview, Trista defined discussion as messy, but one of the best ways to solidify information. Specifically, she said discussions are:

Different than just students answering questions. So in order for it to be a discussion in my mind, it would have to be where students are not expected to raise their hands. They can kind of speak up when it's time, but also not interrupting each other. That it wouldn't just be random comments, but that the responses would have to do with what has been already said and responding to the other person.

In her everyday life, Trista feels that discussion is "integral... Discussion is kind of the thing that kind of brings joy to a relationship, right? Without discussion, you're just taking care of business and coexisting." One of the places she participates in discussion that she finds especially rewarding is during her weekly bible study. In a small group of about six, they take turns leading the discussion, connecting their reading to their personal lives.

Trista suggested the goal of engaging in discussion can be very different depending on who she is engaging with and why:

At [bible study] ... edify one another. And then also to see, like how could we pray for each other, that kind of thing. But then other discussions, if it's in my classroom, I usually have a direction that I want to go. So, I want [students] to eventually reach a certain point of understanding or consensus or something like that without me actually having to just tell them the way it is. I can't always get that to happen. So, then I have to throw in my own 2 cents, I feel like. I think at staff meeting, as a teacher, it's interesting, cause I'm not in charge of staff meeting, but I would say when I was principal and I'd bring up a topic, I think part of it was, I wanted to know how people are feeling, what are people's outside views of different things, but then also letting people share their own expertise with one another...

But more than just accomplishing specific goals, as outlined above, Trista says "I don't really like just having little chit-chat, I'd rather have, like, more of a deeper discussion about something." This speaks to Trista's definition of discussion as something that is relational and "brings joy." However, even recognizing this, there are times Trista intentionally does not engage in discussion. These include when people have different opinions, when there's not enough time available, or if participants are unprepared for the discussion. She says:

If it's with a person who I know my views are really different, if it's politics or something like that, I may say less than I want, or just not really pipe up, let other people do the talking. I guess if it's in class and we just don't have time for a discussion, I often just say we're not going to talk about this right now. Let's keep going on what we have to get done. So yeah, I do, I do shut down those discussions, but I know that they're important. So, I try to stick them in where it makes more sense where there's time and where we can actually discuss it. And sometimes students aren't ready to discuss things yet because

they don't know enough. So, if we start trying to have a discussion, it's going to be uninformed and people are going to say things that they have no idea what they're saying, and that's not going to be helpful at all.

But just because she does not engage in the discussion right then, she does mention that if the reason she chooses not to engage is time or not being prepared and she feels that the discussion would be worthwhile, she will attempt to remember that and engage in that conversation later when the right factors are in place.

Education Experiences with Discussion. Throughout her education experience, Trista felt that discussion rarely occurred in her PK-12 experiences. She said, "I'm not saying that it didn't happen. But I don't feel like discussion was often what was going on in my classes." In thinking about her public school education, she could not remember a single example of discussion from her classes.

However, that changed in college. Trista attended a small liberal arts college where she found she was able to engage in a lot of discussion based learning:

Almost every class was pretty heavily discussion based. I was an English major. In English, it was very discussion-based. Even in my music classes, I would say we had a lot of discussion. Others, there were some definite lecture classes for sure, but most of the time it was a discussion, a small class sitting around in a formation that would facilitate a discussion.

But despite experiencing a large amount of discussion during college, the discussion experiences she remembered were not positive. She said:

Sadly, the ones that, like, stick in my brain were not good times... I took a class that was just William Carlos Williams poetry. It was really tedious. And I realized I didn't really

like his poetry very much... A lot of times I was not prepared, most of my classmates were not prepared, and so our discussion was really lame. And I remember just feeling really uncomfortable with that. I took a modern poetry class where I felt like everybody was usually always prepared and it felt really productive every time.

This experience with discussions where preparation made a big difference to the quality of the conversation likely impacted Trista in meaningful ways. This is especially apparent in the quote shared above, when she mentioned she chooses not to engage in discussions in her classroom if students are not prepared.

In thinking about whether her educational experiences prepared her to engage as a citizen, specifically as it relates to discussion, Trista said:

I just remember having lots of discussions with college friends in my classes, but then [also] outside of class or during dinner or wherever... it might be about our faith and like some differences in our life, like things that we believe differently. And just being able to talk about those and my eyes being open, you know, just kind of thinking, oh, this is a view I've never heard of and something I've never thought of and just not letting it become like antagonistic, but just, okay. That's something new. I need to think about that. And here's my view. Maybe you can think about that, and can we reconcile them or are they totally different? And I think that's a lot of what we have to do as citizens is to be able to be open-minded enough to hear opposing thoughts and views, but solid enough in our own understanding and being willing to change our mind, but not just wishy-washy like changing at any with every passing whim, I guess.

This perspective seems to deeply influence the ways Trista includes discussion as part of her teaching practice. Since a large part of Trista's education experience centered around learning to teach music, she was not formally taught to teach using discussion techniques. Many of the skills she uses to facilitate discussion were developed as part of her life experiences or through professional development at her current school. Still, she mentions using discussion in bible, history, and literature lessons, and that she especially like to use discussions as assessments:

I wanted to assess, are they, are they using things that they learned? Specific details. And I told them, you know, when you get, when you give your opinion, support it with things that you know to be true... I think the students enjoyed it a lot more than writing an essay... and I probably got better information because just the nature of a fourth or fifth grader, they won't write everything that they know because it'll hurt their hand. I mean, some of them would, and it would take forever, and others will just write a couple of things. And I won't know if that's really all they know or if they understand more.

In our interview, Trista also shared an example of her experience using a specific discussion strategy. She made up her own name for this activity but described it in the following way:

I had 13 students at that time, and I had probably six in the middle and seven around the edge of the circle and only the middle people could talk at first and then I would stop and then the outside people could ask questions of the people on the inside. Then I had them switch places and I gave another question and then they discussed and the others asked questions.

However, implementing this technique did not seem to go the way she hoped it would:

Looking back, there was someone who really dominated the discussion. And I think what I had said was be sure that you're giving everyone an opportunity to talk and I am assessing you. So, I want everybody to talk, so speak up, you know? So, I think there was a point where one person was just talking and talking. I'm like, okay, you're done

talking... I think that could have gone a little better if I would have just said here's the rule: you can say your thing, but then you can't say anything else until everyone else has talked.

Throughout the interview, she seemed to appreciate the role of discussion in the classroom and seemed very excited to improve her skills and learn additional ways to successfully use discussion in her classroom.

During: Professional Development and Observations

Integration of New and Old Practices. In the summer of 2018, Trista attended a professional development seminar about growth mindset (Brooks et al., 2012). Upon her return, she began to incorporate growth mindset techniques into her classroom culture. As not only a faculty peer teaching third grade but also the parent of a fourth-grade student that year, I had a front row seat to witness the ways Trista began to weave these ideas into her practice and interactions with students. Knowing this, three years later, it is easy to see evidence that this training has stuck with her in meaningful ways. Beyond the growth mindset posters that still exist on her walls, I found multiple examples of Trista incorporating growth mindset principles with new discussion techniques learned during these professional development sessions. In one case, following the philosophical chairs discussion, Trista handed each student a Student Discussion Evaluation form (See Figure 4.1). During this discussion, twelve of fifteen students had participated, but three had remained silent the entire time. Upon receiving this form, one student, Aaron, looked sad as he read through the list of items on the form. He raised his hand to ask if it was too late to participate in the discussion. In this moment, even though the discussion was over, Trista chose to allow Aaron to participate. While in many ways providing a comment after the discussion has been completed is not true participation in the activity, Trista's

willingness to provide space for a second chance speaks to the way growth mindset ideas permeate any new techniques she uses.

Figure 4.1.

Student Discussion Evaluation Form

Student Discussion Evaluation	
Student:	Date:
I participated in the discussion.	12345
I stayed on task at all times.	12345
I made eye contact with my peers.	1 2 3 4 5
I was respectful to others.	12345
I spoke in complete sentences.	12345
I used notes/text to explain my thinking.	12345
I repeated/rephrased ideas.	12345
I stayed on topic.	12345
/40	My Signature:

Note. Student Discussion Evaluation form used by Trista during Philosophical Chairs discussion.

Throughout the year, Trista consistently and continuously implemented new discussion techniques into her existing classroom routines. In almost every interview I conducted with Trista, she talked with me not only about the professional development session she participated in or the lesson I observed, but also referenced additional times she continued to implement the new discussion strategy. When I came in to watch her implement these strategies, I also noticed ways she integrated old and new practices, either through observation or comments from the students. For example, when students returned to the classroom to begin their pyramid discussion, Trista had moved the desks into groups of four rather than their traditional "U" shape. Upon seeing this, a student said, "How are we going to have a discussion if our desks are like this?" This comment made it clear that, in February when this observation took place,

participating in discussions had become a routine part of their classroom practice with set expectations. Also during the pyramid discussion, Trista used a bell to indicate when it was time to conclude each round of discussion and move on. Based on the student response, this was an existing classroom management technique that Trista integrated with the new strategy of pyramid discussions to facilitate student participation.

Another example of how Trista integrated old and new practices appeared in the way she deconstructed the discussion experiences. After both the philosophical chairs and fishbowl discussion activities, she gave students the opportunity to talk about how the lesson went. While this was a regular part of the professional development sessions, in our follow up interviews, I asked Trista if debriefing class experiences was something she frequently does as part of her teaching practice before participating in this professional development. In response, Trista said:

I think that I try to do that, especially if it's something new or even like behavior issues. You know, if we're having a fight on the playground, like, okay, let's talk about... what are our actions? What's your action? What do you, you know, what can we do in these situations where you're feeling a little bit heated? And so I try, I try to do that.

In my observations, I did witness her conducting the debrief after trying something new. After philosophical chairs, they discussed the process afterwards. After the fishbowl, they did the same thing and, following the debrief, Trista said she thought the experience would go better next time now that they understood the activity. The following week, they did attempt the fishbowl again and Trista said:

It actually went a lot better.... Before we started, I had them remember, like, what are

some of the things that we want to remember this time around? I had sort of the opposite problem in that a lot of people who would normally jump in were waiting and waiting and waiting... I think overall the discussion, the flow went a lot better.

In these few observations, you can see examples of the ways Trista used her regular classroom practices alongside new techniques in ways that she later told me was not always aware of doing.

Excitement and a Desire to Improve. In addition to impacting her students, Trista appears to lean into ideas related to growth mindset in her own personal and professional development experiences.

Unlike some of the study participants, Trista quickly signed on to participate and throughout the study, she appeared excited not only to participate but also to improve her own practice. At our first professional development session, she sat up front, right next to me. Throughout the entire lesson, she was an active participant, answering questions and providing examples. And when the session was over, she immediately turned to me and said "I know when I'm going to use this. I have a lesson about Irish home rule next week that I wasn't sure how I would teach, and this would be perfect." After the first lesson, at our post-observation interview one week after I observed the lesson on Irish home rule, Trista told me "We've already used this a few times... we did one that was we're just going to discuss virtue in *The Hobbit*." Following this interview, she continued to use the strategy and was eager to tell me about those experiences as well, and in many instances, she invited me in to watch. On the post-it note she filled out during our final professional development sessions, she indicated she had conducted the philosophical chairs discussion three or four times and the pyramid discussion once. From our final interview, I know she also conducted at least two fishbowl discussions.

Throughout the year, this desire to improve continued to be present. In each of our interviews, she made comments like "There's probably some instruction that I can do that will help future discussions go better" and "We all learned a lot doing it, so I'm not really sad about how it went because I think for them to make the mistakes actually was even better than me like trying to warn them like don't do this or don't do this, or try to think of every wrong thing they could do." While these quotes provide just a snapshot of Trista's engagement level, they provide nice examples of the level of her desire to improve, on behalf of herself and her students, that was present throughout all of my interactions with her.

Her desire to improve is also evident in the impetus for modifying the reflection portion of this study. Initially, I planned to ask each teacher to reflect on enacting the lesson independently (without me). However, after the first classroom observation, Trista came to me seeking feedback and wishing to deconstruct the experience together. Throughout the interview, it became evident she requested the meeting to receive feedback that would help her improve her teaching practice. For example, she said "Did you see anything I could have done better or differently?" Additionally, following this initial philosophical chairs experience, she implemented the same technique 3 more times, each time reaching out to me in some way to again receive feedback. In one instance, she came to talk to me about it afterward. The second time it was recorded because she had a student who was quarantined and participating via zoom, so she sent me a link to the discussion to watch and provide feedback. The third time, she invited me to come back into the classroom to watch the strategy enacted again.

Examples showing Trista's desire to improve often dovetailed with incidents showing her excitement. As we moved through interviews and observations over the course of the year, I

would often note Trista's excitement about both learning new techniques and the responses from her students when implementing them.

In response to learning about pyramid discussions, Trista said "I had never thought about doing a pyramid discussion that way, and I think it could really draw out some students that don't often share." Then, after enacting the pyramid discussion, she said:

It really was the culmination of lots of lessons and having done things a little bit differently. It was really great to hear how they could, like, synthesize so many different parts of the war into like some cohesive, really cohesive thoughts. So that was really exciting. And that they could do that. They all shared and they all could speak and say something meaningful. That was really good.

In the first observation, philosophical chairs, Trista facilitated a discussion about Irish home rule. During this discussion, students were assigned to make a case for or against home rule, and Trista assigned students to the side they were expected to advocate for, and this resulted in critical dialogue about the topic as recorded below:

Jackson (representing an Irish citizen): It kinda feels like we are your puppets that you are just manipulating to do whatever you want instead of letting us have liberty.

Trish (representing England): I don't agree with Jackson because what is a puppet without strings? You said that we were basically controlling you, but if we don't have

Isaac (representing England): I agree with you Trish, but are you saying that we are the strings or the puppet?

string on a puppet, what could we do?

Trish: What I mean is like whenever you're doing a puppet show, without us (the string), you would be nothing. Like without the strings of the puppet... [lots of chaos/kids chiming in]

Jackson: I disagree with that because if you guys weren't just manipulating us and using us, we would be able to have more freedom and not just always having to do whatever you want us to do... [lots of chaos/kids chiming in] We could make decisions.

Rider (representing England): I do agree but even if we do give them liberty, their own government could be their strings. It doesn't have to be our government who is the strings.

At this point, there was a significant amount of chaos and Trista jumped in to redirect, but in our follow up interview she referenced this incident:

Some of their arguments, like I think Trish said something about being puppets and I thought "Wow." That was quite a, it was really a good parallel or metaphor for a fourth grader to draw. So that was surprising... [there was] more, more engagement for sure [in comparison with normal class engagement].

This was a moment when Trista was excited because the level of connection students were able to make from the history lesson went beyond what she expected them to be able to do, but this type of excited statement was the norm, not the exception. For example, after learning about fishbowl discussions, Trista said "This is the perfect way to synthesize our whole year!"

Support. In interviews reflecting on the professional development sessions, Trista often mentioned specific experiences that provided an initial level of support for planning and enacting the discussion strategy. For example, after the second professional development session, she said:

Like a lot of times, we'll do professional development and not have an actual example of what we're looking at. So I liked that you had the example of the lesson and what you would have used in the stages you had gone through to teach that lesson. So that's really helpful.

Similarly, after the third professional development session, she said:

I mean, I don't want to say that there's never interaction and practice of the [strategy being taught], but it's not as common. And so I liked that, like getting to put it into practice. Especially with something that doesn't seem too contrived, sometimes it can seem weird.

These experiences could be the reason she consistently shared that following our professional development she felt more prepared to engage in discussion with her class and that she felt prepared to implement the strategy presented. However, despite Trista's excitement over implementing new techniques, her desire to improve, and her positive reaction to professional development sessions, in many cases, I still witnessed a need for additional support as she created lesson plans.

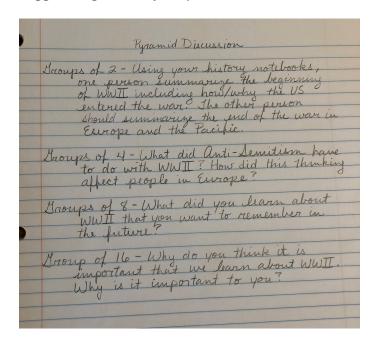
After the second professional development session, in a similar response to the first, she said "I have a discussion planned for next week. I was going to use philosophical chairs again, but I can use this instead." Though prioritizing implementation of discussion techniques, until she had been introduced to a new one, it appears she was satisfied to continue to use the first strategy for all of her discussion needs.

Once making the decision to use this strategy, Trista also requested help planning. When we met to conduct our follow up interview after the second professional development session, she said she felt great about using the technique but indicated she might need help developing

questions. After the interview, we spent time discussing what implementation of this strategy would look like in her class. A few days later, she texted me: "Do you have time to talk about my pyramid discussion coming up on Thursday? I'm eating lunch outside." I met with her during lunch and helped her begin to think about potential questions for the discussion. That evening, she texted again, this time with a picture of a list of questions, presumably for approval before the observation two days later (See Figure 4.2).

Figure 4.2.

Suggested Questions for Pyramid Discussion



Note. Photograph of Pyramid Discussion questions received via text from Trista.

Teacher Agency. In addition to the observations outlined above, I also noticed ways that Trista demonstrated agency. When referring to professional learning, teacher agency can be defined in many ways. Throughout this study, when I use the term agency, I am choosing to define it as "an empowered positioning of teachers as active and adept practitioners in their field, embodying knowledge gained in learning contexts through personal judgment and ability to act."

During the professional development session about pyramid discussions, as the teachers themselves were participating in a pyramid discussion, Trista and another teacher had a discussion about ways to possibly modify this technique depending on the needs of the students in their individual classrooms. In our interview, she shared details of this conversation with me:

[Another teacher] was in my group every time that we broke out. We were wondering if it might be interesting to try, like the more in-depth questions with just two kids and then kind of move out that way as we got bigger groups. I don't know. I think that could be interesting. Or start with a bigger group, like you have to have groups of eight... a reverse pyramid! Like just would that, what would that be like? And might that, if you did it first, you did eight kids and you talk about sort of a surfacey thing and then you break it smaller and then you get up with these two and then maybe they, the kids who are reluctant to share, it would be like, like ready to share a more deep thought, like, would that draw them out in a different way?

Although I am not sure whether Trista did choose to implement the "reverse pyramid" technique, this does demonstrate ways she took what was learned in the professional development sessions and thoughtfully considered ways to modify new techniques to support the needs of her students.

In actual classroom practice, I observed this during Trista's lesson about home rule.

Initially, she assigned half of the class to defend the Irish perspective and the other half to represent England. However, about halfway through discussion, she had students switch sides.

This is not something that was modeled during our professional development sessions, and it was not something she had planned going into the conversation. In reflecting on the lesson, Trista said:

I think we had sort of exhausted a lot of the reasons [for or against home rule], but there are, they had exhausted the reasons they had, but there might've been some other reasons or other points to bring up. Like I had some points that they hadn't talked about yet. So I thought maybe if we switched sides, someone else might've thought [something different]. Cause once we, once I said, okay, this side versus this side, this side had all my deep thinkers and this side had not my deep thinkers... Like, I don't think they did terrible, but I, I thought, well, it's really like weighted heavily over on this side of the, being the people that, you know, they speak up and they can pick apart an argument. So I just thought that would give that side some time to be the Irish people and bring up some of the other points maybe that hadn't been brought up before. I don't know that that actually happened, but that was kind of my thinking.

This ability to switch gears based not on an example she had seen but on the needs and abilities of her students shows agency in implementing new strategies.

I also noticed ideas of agency in the ways Trista talked about assessing discussions.

During the professional development sessions, we didn't discuss assessment until the last session, but in our first round of interviews, Trista was already beginning to think about what assessments might look like when she said:

I need to think about what I want them to do during a discussion so that I can quickly grade something like that and get [students] their grade...I also need to think about what to do about people who don't do anything.

Because Trista displayed agency in developing methods of assessment that corresponded with different discussion strategies and purposes, I was able to use examples from her class when developing the final professional development session that addresses assessments alongside the

fishbowl strategy. These three examples illustrate ways Trista engaged in agency, directing her own growth and contributing to the professional growth of her colleagues.

After: Post-study Reflections

Evidence of Change. While Trista's general definition of discussion was similar from the beginning of the study to the end, she was able to describe discussion in a more succinct yet nuanced way, saying, "discussion is using the information we know about a subject or that we think about something to talk with, to talk amongst a group of people and gain a deeper understanding." In our post study reflection, she said "Well, now I'm thinking about all the discussion strategies we've learned and the ways that I want to incorporate it into my classes, and I definitely feel more prepared for using discussion."

Additionally, when asked why she chooses to engage in discussion, her answers became more nuanced. In the initial interview, she mentioned wanting to know how people feel, learning outside views, and leading students to a specific viewpoint, but in the post study reflection, she said:

Sometimes it's more just sharing of thoughts or even sharing of my life, what's going on, what is what's going on in my friend's life... and then sometimes I think with teachers, a lot of times it's like problem solving or sharing ideas or sharing, you know, new perspectives. And then with my class, I think I'm always trying to draw out of them, like, what they know or what they think and how they could, like, use that in their life.

This change seems significant as Trista moved from wanting to lead students to a specific viewpoint, a teacher-centered approach to instruction, to wanting to draw out what students know and connect it to their lives, a student-centered approach to instruction.

When discussing specific ways she incorporates discussion in her classroom, Trista's answer also shifted. In the initial interview, she focused on using discussion as a way to conduct assessment. While I think she will likely still continue to use discussions in that way, in the post study reflection, she also said she would like to have a discussion in her class at least once every week.

Perception of the Learning Experience. When asked about her perceptions of the professional development learning experience, Trista said:

I think that you would basically tell us how you would describe the method. And you use a topic from The Academy, which was really helpful cause usually we're all pretty familiar with it and then we would actually do the strategy as a group and then we would sort of debrief about it and talk about how we could use it in our classrooms and what kind of, what things we would have to alter or change or what might be the pitfalls or things to be ready for. We talked about assessing, which was helpful [and] I think me trying it out with my class, that was definitely learning. I think there were a couple of times that you even helped me like think through what questions might be good and that was definitely helpful. And then sort of even the debriefing and talking about like, what, how could I make this better, make this different? That was really good.

As Trista was the impetus for conducting the final reflections together rather than have teachers do that independently, I asked her why she sought me out to reflect on that experience jointly. She said:

I think I just thought you would probably have more insight, you know, you'd done more discussions and you, I don't know. I just thought maybe I could learn something. I could

have some feedback on things that I could improve or things that I could think more about before I do my next discussion.

In this summary, Trista does a nice job summarizing the key pieces of the professional development sessions, including the formal training, use of familiar curriculum, engaging in the strategy as a group, reflecting on the experience, using the strategy in the classroom, and reflecting on that experience. While she mentioned using the strategy with her class was helpful, she also specifically notes the usefulness of some key pieces that were distinct to this professional development: incorporating topics teachers are required to teach and joint reflection with the professional development presenter.

Faye

Mrs. Faye Wheeler teaches a second-grade class with ten students. She started out as an Early Childhood Education major in college, but ultimately switched majors for what she referred to as "stupid" reasons: she wanted to make more money and was worried about her ability to provide for herself. As a result, she earned her bachelor's degree in Nursing, but after working as a nurse in ICU and cardiology for one year, she left the profession because of the emotional toll. She did not feel she had the bandwidth to pursue nursing while also being a new mother. When her oldest child was school age, Faye enrolled him in the blended program at the local private school where she now works because of his specific learning needs. As part of the blended program, her son attended school two days a week and was homeschooled 3 days a week using plans provided by the classroom teacher. Faye felt the blended model was appealing because her son thrived on "down days" and excelled due to smaller class sizes. During these elementary years, much of Faye's time was spent homeschooling and helping her son manage his occupational therapy and ADHD needs although Faye also taught at a preschool for three years.

After enrolling her own children as students at this local private school for several years, Faye decided to pursue a career teaching there. She loved what the school was doing, but also felt that in doing so, she was able to return to her first love: teaching. In fact, in thinking over her transition from nursing to teaching, Faye reflected that one of her favorite things about nursing was educating patients and family members about how to take care of themselves. After teaching first grade for two years, Faye is now in her second year of teaching second grade. Although she has considered returning to school to earn a MAT for several years, she has yet to take this step. While Trista and Sabrina both signed up to participate in the study immediately, Faye responded after the second announcement and seemed interested but less convinced the topic of discussion would be useful in her second-grade class.

Before: Personal Experiences with Discussion

General Feelings About Discussion. In our initial interview, Faye defined discussion as two or more people intentionally sharing their ideas about a particular topic. In her everyday life, Faye feels that discussion is an important part of her life and engages in discussions with many different people, including her husband, coworkers, family, and church friends on various topics including parents, money, the future, jobs, political events, religion, leadership, and the future of the church. More specifically, she says "if we want to have relationships with people, we have to be willing to discuss things."

When asked why she chooses to engage in discussion, Faye suggested three primary reasons, enjoyment/fun, problem solving, and goal-oriented:

Sometimes it's just, you know, enjoyment because I like sharing ideas with other people. I like talking to other people. Sometimes it's because we need to solve a problem, sometimes it's because we need to work out a problem, like a work out, a particular, like

relational problem. Sometimes its goal driven as far as like, okay, we need like, there's an agenda sometimes.

However, despite her assertion that discussion is a big part of her life and generally enjoyable, she also indicated there are times she consciously chooses not to engage in discussion. These include lack of time/attention, knowing that she would disagree with a specific person, or just not wanting to:

I would say there are times when I avoid a discussion or consciously choose to not have discussion if I don't feel like I have time or the attention to give to that discussion and I feel like it might not be resolved in the way that it needs to be. And sometimes I also don't want to talk to certain people about certain things, because I know that we disagree... If you don't have time to resolve it, I often don't really want to start it, especially if it's someone I don't see very often. And I would say there are people that I know that we disagree, and I'd rather preserve a relationship than get into a discussion about something.

Despite seeing discussion primarily as a positive thing, Faye also recognizes discussion as a possible point of conflict.

Education Experiences with Discussion. Throughout her education experience, Faye felt that she personally did not have much experience with discussion as a student. In thinking about her PK-12 experience, she could only think of two teachers who engaged in discussions while teaching and attributed that to the fact that those teachers were "more relational with their students." In general, she says, "there wasn't like a free exchange of ideas." She also does not remember ever breaking up into small groups to do discussions, if there was a conversation happening, it was "always large group."

Faye attended a large public university, and, in her college experience, she participated in mostly lecture courses. She remembered only one course, led by a community based nurse with about six to eight students, where the teacher regularly engaged in discussion with the students. During our interview she recalled a specific discussion experience in this class where the instructor shared a personal experience to help students understand the complexity of an issue. This was one of the only impactful discussion experiences Faye could remember from her education experience.

In thinking about whether her educational experiences prepared her to engage as a citizen, specifically as it relates to discussion, Faye said:

Yes and no. I think that this high school, that the school system I was in, that wasn't really a high priority for them to teach us to discuss, well, I just didn't... I felt it was more of a personal choice of a teacher rather than a policy of the school or whatever, you know? It wasn't something that seemed important in the public school system that I was in. College... Probably more in my later classes, my upper level classes. Yes. I think it really, I think, I think the exchanging of ideas, I think that it helped me to be bolder and not as... because I think before college, I was more reluctant to share my ideas, or I was more self-conscious about what people would think of me. I didn't speak up as much. And I think in, in college I sort of grew in that way. But certainly more so in the, like the upper level classes than like my freshmen and sophomore, you know... Large lecture hall type classes didn't really do much for that at all.

Moving beyond her experiences as a student, in our initial interview, Faye suggests that as a teacher she uses discussion "in almost every subject [her class] talks about." She sees it as a key part of her teaching, but says she is not as intentional about it as she would like to be. She

specifically says she does not implement specific discussion based teaching techniques with second grade students. This may be the result of not having a background in teacher education.

While Faye does reference a generic training she participated in about Socratic teaching methods, without specific exposure to discussion based pedagogical strategies, it is not surprising she does not incorporate them into her classroom practice.

Beyond that, Faye also shared her primary goal in incorporating discussion in her class is to help students remember things they learn about:

I felt like the more we talk about [a topic], the more we relate it to maybe a past event we've talked about or something current, the more, the more we talk about it, the more we make it a discussion, the more, the more that kids are, are required to maybe dig into their brains and recall some information that they've have heard, the more they're going to retain it and be able to use it.

Despite recognizing this as her primary goal, Faye did share that in her class she's been able to witness a few times when her second grade students were able to meaningfully engage in authentic discussion. In referencing a specific discussion about a Bible story about the Judges of Israel, Faye says "it was really cool to just see like how insightful even eight, nine year olds can be. I mean, gosh. They really can come up with some pretty profound things if we just sort of let them speak."

During: Professional Development and Observations

Hesitant to Fully Buy In. While not fully present in our initial interview, throughout our conversations during professional development sessions and observations, I found Faye was the most reluctant to fully buy in to not only participation in the study at large, but also participating in professional development sessions and incorporating techniques into her classroom practice.

This was evident in multiple ways. First, during the initial PD session, I asked teachers to engage in a philosophical chairs discussion about the book *The Hiding Place* (Ten Boom, 1974). In this discussion, teachers were asked to choose whether it was right for Corrie Ten Boom to steal ration cards for the Jews. From the beginning, Faye was hesitant to choose a specific side for this discussion but ultimately chose to join the majority of teachers who said yes, they felt it was right. However, as the facilitator, I was concerned that the uneven distribution would prevent us from having an engaged discussion and asked for a couple of volunteers to represent the opposing viewpoint. Faye volunteered to switch. She was hesitant to join a side and easily convinced to represent the other viewpoint (not fully bought into a decision she made).

This behavior mimics the ways I saw Faye engage in implementing the new techniques in her classroom. Initially, she communicated that although she was unconvinced incorporating discussion in a second-grade classroom was a good idea or even possible, she was willing to give it a shot. In our reflection after the first observation, she shared that she felt implementing the technique went ok but provided a caveat: "I think they did well for their age. Would have gone better with older kids." In hindsight, she said, she would adapt the activity and provide more structure for younger students but was quite frank in admitting that she was unlikely to try this strategy again. This appeared to hold true. In April of the same academic year, she still had not tried to duplicate or improve the philosophical chair activity a second time.

However, despite her hesitancy, Faye did continue with the study and over time, she did appear to slowly buy in to the idea of discussion as a viable teaching strategy with second-grade students. Following my second observation when she implemented the pyramid discussion technique, she expressed that the lesson was a "good change of pace" and felt the experience was "as valuable" for students as the activity it replaced (in this case, a comprehension worksheet).

However, in different ways than the first observations, the enactment of this lesson did have characteristics that were reminiscent of the theme of a hesitancy to fully buy in. For example, she chose to use this activity during the lesson I observed because she could use it with "what [she] already had." By this, Faye was referring to the comprehension worksheet mentioned earlier, although she did express, she thought she might get some "different responses, maybe some more independent responses." Although in the professional development session I modeled creating questions that were scaffolded and moved from fact-based questions to questions that required deeper thought, in this lesson, there was no thoughtful creation of new content. Instead, all of the questions were fact-based questions lifted directly from an existing worksheet.

During the third observation, Faye was openly hesitant from the start. In the interview we had after the professional development session, she said "I'm a little skeptical about how it will work in second grade if I'm honest. But we're going to try it." Throughout our conversation, she expressed concerns she had about implementing this strategy in her classroom. However, the experience she had in using this strategy was extremely successful. In my 25-minute observation, students were introduced to the fishbowl technique. The teacher participated as a student in a fishbowl about the book *Pinocchio* (Collodi, 2011). The students politely and respectfully tapped in and out and engaged in what I consider to be critical dialogue at the second grade level. For example, in discussing the question "What are some ways our book saw Pinocchio show the character trait of honesty?" students considered what it means to be honest, as seen in the exchange below:

Brooklyn: Oh! Oh! He was honest when, um, he said to the policeman that he didn't throw the book at them but the policeman didn't believe him so he got sent to jail and I

think that was when he was honest (long pause) and that's the only reason I can think of honest for him.

Savannah: He was dishonest a lot of times. When he lied to the fairy that he was, when he was, he lied to the fairy...

Jamie: When he just met her?

Savannah: Yeah, when he just met her. No, when he was going to school or...

Jamie: Oooohhh...

Savannah: When he lied and he said, "What I say is what I do."

Harry: But I wouldn't say that was dishonest because he didn't know. He can't tell the future but then he didn't do it. So, it's kind of not honesty but not dishonesty. It's kind of in the middle. Because he can't know the future. No one can know the future.

Jamie: Cause he's a puppet. He was just dishonest a lot of the time.

Harry: Yeah.

After this final iteration of formally (and, in her mind, successfully) implementing the strategy, Faye said:

It was pretty cool to see... I definitely think I'd try the first couple again. The philosophical chairs again, I think I would do it a little differently, just that I think I make it more structured from the very beginning and I don't know, I'd probably change a few things. But definitely... regardless of what method they're using to discuss, the more you do it, the better you get at it, even if you're using a different, you know, model to actually do it... I would much prefer to do more discussions in, like, with our literature packets and stuff like we did instead of just doing, like, worksheets or whatever with the kids. The kids love it, you know, they prefer to do that too.

From this quote, Faye demonstrates she was pleased with the results in a way she had not been previously. Over the course of the three sessions of professional development surrounding discussion based teaching techniques, she moved from open hesitancy to positive acceptance and expressed a desire to not only continue to schedule the use of discussion strategies in her classroom but to schedule them so frequently that "down the line, [she will] be so used to integrating those that [she will] use them naturally."

Imitation. In the interview following the second professional development session, Faye mentioned that a key difference between this series of professional development sessions and others she had participated in in the past was the inclusion and emphasis of real-life examples. She said:

There was a lot of participant participation and discussion and interaction... I don't know that we always get like... actual demonstrations of how those things apply. We don't often have examples. So like maybe we were given a broad idea of how to do something or some instruction about something, some theoretical model, but maybe not necessarily put into practice.

This perception was reiterated after the third session, when Faye further elaborated:

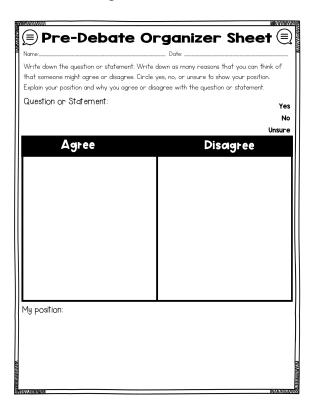
I liked that [the professional development session] gives us specifics and that we've practiced it. And not just someone out there telling you about something... Lots of times, it's just a demonstration and not so much actually doing the thing. [Doing the thing] works a lot better than just someone showing you a slideshow of the things you're supposed to do and then sending you on your way."

Participation in the strategy gave Faye a tangible example of what implementing the strategy could look like, and she appeared to rely heavily on those examples when implementing the technique in her classroom.

During the philosophical chairs professional development session, I used a set of resources that I also shared with teachers. These included some worksheets to help students organize their thoughts and a set of classroom signs that I had put up signs around the room outlining expectations for the discussion. These signs included sayings like "Please be respectful of others' opinions," "You need to listen and make eye contact with your peers," "You must rephrase the last statement that was made." During my observation in Faye's classroom, she used these signs as well as the "Pre Debate Organizer" worksheet (Figure 4.3).

Figure 4.3.

Pre-Debate Organizer Worksheet



Note. Worksheet used by Faye during the philosophical chairs discussion.

Additionally, in the first professional development session, I set up the room with teachers sitting in a circle and allowed them to move around the room as their opinion changed. Faye also set the room up with students sitting in a circle and allowed them to move as their opinion changed. However, this dependency on imitation did not serve Faye well and seemed to strip some of her autonomy. For example, one of her concerns about the first session was the way students kept moving. She said "And then the moving around to the different places ended up just like being who do I want to sit by? Like, who's my friend? And like, it just got silly." However, rather than take control of that situation and make adjustments in real time, she continued to implement the lesson as she had seen it enacted. In reflecting on the experience, she said when her student students get "silly":

Typically, I have to just kind of stop what we're doing and so I didn't really want to stop what we were doing until I felt like we'd gotten everything out of it we could. And so I let it go a little longer than maybe I would... If we were playing, like, a game and they started getting overly silly, then I would just be like, okay, we're going to stop doing this now because you know, too silly and we're not really accomplishing their purpose of the game.

In attempting to implement this specific discussion strategy, she relied on imitation rather than drawing from the pedagogical content knowledge she already has as a teacher or the relational knowledge she has about the students in this specific class.

This need for imitation also forced me to confront limitations of my own methods as the facilitator of professional development. In observing the pyramid discussion in Faye's classroom, I noticed that during the first two rounds of discussion, in groups of two and five, the discussion was student centered and authentic. The teacher moved from group to group, checking in, but not

moderating the discussion. This is similar to what teachers experienced in the professional development session. On Zoom, teachers were assigned to breakout rooms with two, four, or eight participants during the first several rounds of questions and I, as a facilitator, visited groups to check in. However, when the whole group came back together, Faye told the students they would have a whole class discussion but "we are still going to raise our hands and listen to our friends when they're telling their answers." This strategy, while it likely helped Faye keep the class from getting "silly", effectively killed any authentic discussion between students. Instead, answers to the question were directed at the teacher who received the answer and called on the next student - a quiet and sneaky return of the traditional IRE (initiate, respond, evaluate) model of discussion (Parker & Hess, 2001). However, in my own reflections and observations, I realized she was, in fact, modeling what I had demonstrated for the group at large during our professional development session. When we came back from breakout rooms on Zoom and met together for a whole group discussion, I also fell back onto my own discussion experiences and conducted the final conversation using the IRE model. Teachers directed their answer to me, and I spoke/summarized what was shared in between every answer that was shared in the whole group. In many ways, I feel this was a side effect of moving the training to a virtual format with significant limitations for conducting whole group discussion, but this unintentional action (modeling the IRE method) had significant implications for the study not the least of which was exposing the level at which study participants relied on the model provided to implement the technique in their own classrooms.

By the final strategy, however, Faye seemed to be able to move beyond imitation in a way that was not true at the beginning of the year. For example, in implementing the fishbowl strategy, she chose four questions and planned to conduct four "rounds" of the fishbowl. In the

first two rounds, she chose to participate with students in groups of four. In the third and fourth rounds, four students would participate without the teacher. These groups would rotate in and out all together, without tapping in or out. However, after the third round, she abandoned that idea and instead empowered students to go ahead and start tapping in. Not only did she not imitate the strategy as presented from the beginning, but she also felt free to modify it from her original plan in the middle of the activity. She said:

They were doing so well with it, and I could tell, I mean, I don't want someone to not say something, if they had something they wanted to say, right? So it felt like, it felt... I think there were a few kids who wanted to tap in just because they wanted to be part of the conversation, which is fine. Like, I don't think that's a bad reason either to tap in, but other people you could tell they had something you had like an answer that they wanted to give. And then, so I thought, I don't want to like keep them from doing that.

Sensing the needs and ability of her students, Faye was able to break away from the demonstrated example, change course to keep students engaged and empowered to participate in the discussion.

Needs to be "Ready". Building on her assertion that "we don't often have examples," after the second professional development session, Faye also said she felt "The pyramid discussion I think would actually work really well in second grade. I mean I'd have to tailor it a little bit, but I think it would work really well in my class." This statement shows a considerable amount of movement from her feelings during and after learning about and teaching the first strategy, philosophical chairs, and possibly shows a recognition that she was not fully prepared when implementing the first strategy as mentioned in the previous section. In a reflection interview, Faye said "Philosophical chairs; I feel like it requires a level of independence,

independent decision-making about their behavior that maybe they're not quite ready for." These two statements speak to a deeply rooted need for both the teacher and the students to feel or be prepared, or, what Faye often referred to, "ready." Based on my observations and interactions, Faye did not feel fully prepared for the first strategy, but she did feel prepared for the second.

During the first lesson, she had placed signs around the room to provide norms for the discussion and prepared copies of the debate organizer worksheet used during inservice to help students organize their thoughts, but it did not appear she had thought beyond that. One of the signs asked students to "rephrase the last statement that was made" and while she introduced what this meant, students had a significant amount of trouble understanding and could not seem to implement this idea. Faye also noticed this and, in our reflection interview, said:

I think if I had coached them a little more, maybe they could have, or maybe if we did it a few different times, but man, they just like looked at me with, like, blank stares. So that kind of surprised me.

Further, when she began her lesson, it seemed she had not looked closely at the worksheet (Figure 4.3 above). She asked students the question "Which city state would you want to live in, Athens or Sparta?" and had them write this question down where it says "Question or Statement" on the worksheet before realizing the answer choices (Yes/No/Unsure and Agree/Disagree) would not work with this question. In the middle of the lesson, she looked at me, evidently unsure what to do next and said, "I hadn't thought about this." At this point, I interjected to suggest students relabel Agree/Disagree with Athens/Sparta. She modified the worksheet and continued the lesson, but there appeared to be a lack of preparation which may have been what led her to reflect philosophical chairs "requires a level of independence" her students were not ready for and that she "would make quite a few changes" if she used it with second grade again.

In order to meet this felt need to be "ready," during the second observation, Faye had attempted to set expectations prior to the beginning of the lesson. She started the lesson with a reminder that she had introduced this idea yesterday and went over the expectations for a second time before jumping in. She had also written out the questions on notecards for the students to use in their small groups and was able to implement the lesson in the way she anticipated. In her self-assessment of the second discussion, she said it "went really well" and that she could see herself using this strategy again. This complete reversal between the first and second observations as well as the way she intentionally prepared her students after the first lesson demonstrates the level of importance Faye places on being prepared when learning, internalizing, and implementing new information.

In the final observation, which lasted about 25 minutes altogether, Faye began the session by asking students to visualize a fishbowl to help them understand the activity they were about to participate in. She spent almost 10 minutes of the lesson giving instructions for this new activity which is almost as much time as her students spent in discussion. Additionally, before beginning the lesson, she had students brainstorm the characteristic traits they would be discussing. She said:

We were talking about the characteristics that, the character qualities that Pinocchio had shown. What my curriculum has is just like a worksheet where they're supposed to sort of look at these different character qualities that are listed for them and then pick a few and then write examples of how Pinocchio showed that - which they could have done. And it would've been fine, but so instead, like, I don't know how much of this you were there for, but kind of before you got there, we kind of started brainstorming like, so Pinocchio, what, how would we describe him? And then we kinda narrowed it down... so when the

kids were talking about it, these were things that they had brought up and not things that I had just said, okay, we're going to talk about why he's this. But these were the things that they were thinking about the most, the things that stood out to them the most.

In this lesson, she again took the time to make sure her students were prepared not only for the behaviors they would be engaging in during the strategy but also for the topic they would be discussing by "things that they had brought up."

Rarely Sought Help. Despite her hesitancy, reliance on imitation, and need for both students and the teacher to be ready, unlike the other two participants, Faye rarely sought help in planning or preparing for the lessons she presented. For example, both Trista and Sabrina consistently requested help in composing discussion questions to accompany the topic they planned to present, especially looking for ways to develop authentic questions with no right or wrong answer that, in the second and third iterations, would guide students from fact based thinking to deeper, more abstract levels of thinking as suggested in the inservice sessions.

In contrast, in all three of the lessons I observed, Faye used pre-existing questions from worksheets she has already used in the past. For example, in the first session, she had students discuss life in Athens versus life in Sparta, "mainly because it was something easy for the kids to discuss." In the second session, she paired the pyramid discussion with comprehension questions from a worksheet about *Charlotte's Web* (White, 2012) because "I thought it would go well with, with what I already had." In the final session, she again used a worksheet from her current curriculum to choose the questions she would use while implementing the strategy. While asking for help was not a requirement of participating in the study, it is interesting to note she is the only one who did not ask and, of the three, her questions are the ones that were not able to move from fact-based, surface level questions to authentic, scaffolded questions. Faye got the closest to

development of authentic, scaffolded questions in the final session when she asked students to discuss the character traits of Pinocchio and allowed them to select the character traits they wanted to discuss; however, this was still a question lifted from the present curriculum, not one created by the teacher or students.

In this discussion of *Pinocchio* (Collodi, 2011), the discussion which was the closest to using an authentic question, students also engaged in some of the deepest and most meaningful level of thought that I witnessed throughout the year. Faye said:

It's really cool for the kids to make that connection of like, you know, sometimes people are bad and good at the same time and sometimes people will make mistakes and then they ask for forgiveness and we can do that. Like, so it's good for them to see that, like the complexity of a person.

She continued to say she felt like they were able to achieve this goal in the discussion but does not think they would have had the same experience if they had just done the worksheet.

In our final professional development reflection, Faye indicated she was skeptical about how using the fishbowl would work in second grade. However, despite this feeling, she did not ask for guidance on ways she might modify the technique for young students. When asked how she felt about implementing the technique, she said "I'm fine with it... I worry a little bit about crowd control and how the kids will respond to switching places," but still did not request help in solving this need. In response, I asked her to share how she planned to adapt the activity, and she told me she had already thought about it. In other words, she had developed a plan. As she explained her adaptations to me (having students stand in specific spots on the outside, larger groups talking, switching out the whole group at the same time), I offered alternatives even though she did not request them. For example, I reminded Faye that during the professional

development session, I had participated as a member of the group, and if I was not inside the fishbowl, I was not talking. In response, she said:

I'd forgotten that you'd done that, and that was part of it. Because it would be very natural for me to just stand on the outside and talk. But you're right, if I do that, then it's really just me directing.

Though I cannot think of a specific time when Faye asked me for additional help outside of the professional development session, these two examples illustrate a potential desire and benefit for offering additional support even to teachers who are not actively requesting it.

After: Post-study Reflections

Evidence of Change. While Faye's definition of discussion remained the same, two or more people intentionally sharing ideas about a particular topic, her perceptions of the term by the end of the study increased significantly. In our post interview, she said she felt discussion was necessary for growth, progress, learning, understanding each other, and getting things done. She also mentioned the use of structured discussion as a part of her life inside the classroom.

Additionally, when asked why she chooses to engage in discussion, her answers shifted significantly. In the initial interview, she mentioned enjoyment/fun, problem solving, and to accomplish goals. In the post study reflection, she talked about connecting with people, deepening our understanding of a subject, and seeing another perspective/widening our own viewpoints. This significant change appears to have direct correlation with the topics presented as part of the professional development sessions, especially as it relates to multiple perspectives.

When discussing specific ways she incorporates discussion in her classroom, her answer also shifted. In the initial interview, she focuses on information retention, but in the post study reflection, she says she uses discussion based strategies to deepen her students understanding of

a subject, better understand the meaning of things, and "for better participation,... to reach kids who are more engaged in that form of learning,... discuss respectfully with each other. So they can learn how to talk about things, you know, in a productive manner." Overall, as a result of participating in the study, Faye said she has a better feeling about using discussion based teaching strategies and now approaches them with a little more confidence.

Perception of the Learning Experience. When asked about her perceptions of the professional development learning experience, Faye said:

During in-service meetings, we met you, you know, you lectured about a certain type of discussion and we practiced that discussion as a group. And then I used it in my classroom. And of course, you know, the first time you teach anything or, you know, do anything a new way, you realize what went wrong or what could have been improved upon. So I feel like that's a huge part of learning is doing... You don't really know how to do, [you don't really] learn how to do something until you actually do it.

Notably missing from this summary are the post professional development interviews and the observation reflection interviews. However, that may not be surprising as Faye was a participant who did not seek additional help before implementing a strategy. Despite this, when she says, after you implement a strategy "you realize what went wrong or what could have been improved upon," she does emphasize the role of reflection as crucial to the learning process, whether that happens with a peer, an outsider, or individually.

Sabrina

Mrs. Sabrina Robbins teaches a third-grade class with eleven students. She came to a career in education after five years as a mechanic in the military and earning her bachelor's degree in Christian Ministry from a local regional school that offers night classes while working

full time. Before moving into the elementary school classroom, she was involved in teaching women's Bible studies and various outreach ministries. It was during these experiences that she discovered how much she enjoyed teaching.

Most of her formal education training has been provided by her current school where she has taught third grade for six years. Like Trista, Sabrina was also eager to participate in the study. She consistently seeks out professional development opportunities that will help her grow as an educator. Despite a somewhat overwhelming year due to the challenges associated with Covid, during this academic year Sabrina has pursued additional training by taking online courses to better equip her to work with students with ADHD, and she participated in a Library of Congress online workshop about using primary sources through a local university.

Before: Personal Experiences with Discussion

General Feelings About Discussion. In our initial interview, Sabrina defined discussion as "the free sharing of ideas without judgment." In her everyday life, Sabrina said she really enjoys engaging in discussion:

I have discussions with other teachers regularly, just because I feel like as a teacher, we're always learning and growing and trying to discover new ways to, to either deal with specific things or just do a better job, you know, in general. And I'm always wanting to grow and learn as a teacher. And so oftentimes I'll discuss with you, like, okay, I had this scenario come up and how, how would you have handled it? Or I did this in this scenario. Do you think that was the best option or do you have a better option or, you know, whether it's, you know, in teaching or disciplining or just dealing with random things that occur in the classroom?

Based on this, it seems one large reason why Sabrina chooses to engage in discussion is to learn new information or to problem solve. When specifically asked why she chooses to engage in discussion, Sabrina said:

To get to know [a] person better, to learn something from them... [or] to convey my feelings. And then there's other times, I just want to hear what you have to say about something... I want to learn from you.

However, despite her assertion that discussion is important to her life, she also indicated there are times she consciously chooses not to engage in discussion, especially within her classroom. If she does not feel prepared to talk about a topic, if she disagrees with a perspective, or if she does not think it is appropriate, she will frequently not engage in that conversation. In the classroom, this may look like redirecting the student to talk to a parent. She says there are "areas where parents really need to help guide those discussions in a way that we can't really do as much in a classroom."

Education Experiences with Discussion. Throughout her PK-12 education experience, Sabrina felt that she personally did not have much experience with discussion as a student and was unable to recall a specific experience with discussion until her junior and senior year of high school. At this point, she did take a class about legal studies and remembers discussing specific legal cases with her classmates.

Later in life and just a couple of years before beginning her teaching career, Sabrina went back to college and earned a degree in Christian Ministries. This degree program was discussion focused, with "a lot of personal, you know, application and stuff that we discussed and sharing of life experiences... discussion was a big part of my, my more recent college experience." When asked to share details about a specific discussion experience, Sabrina mentioned a teacher she

felt used discussions successfully, but in describing her discussion experiences in his class, she mostly talked about listening to him share personal experiences, saying "he would often tell us, you know, just experiences he had had... hearing about his direct life experiences in the field kind of was very memorable to me." When pressed to provide a specific example where this professor used discussion based teaching strategies, she was unable to do so and moved to talking about online discussion board posts instead.

In thinking about whether her educational experiences prepared her to engage as a citizen, specifically as it relates to discussion, Sabrina had strong opinions, saying:

As a citizen, public education does not prepare you to be a logical, thinking, reasoning, fact from opinion, or even fact from fiction. Like, I don't feel like the public school system teaches kids how to think. I think it, it tells them what to think and then asks them to regurgitate things. And it goes in one ear and out the other and they remember very little of it and they don't truly learn how to flesh out truth from fiction, honestly. And so, yeah, I don't feel like my public school training... I don't really feel that it gave me the necessary skills to really function.

This negative response provides some insight into the way Sabrina perceived the education she received and the way she perceives her role as a teacher. She continued:

I think I would agree with so many of critics, of, of education who say they, they just want to create little cogs in the factory wheel, you know, let's, let's get you through here and give you at least the rudimentary skills so that you can, you know, go out and be a producer and not so much a person who is a deep thinker, you know, and can engage with higher level things, you know, higher level of ways of thinking and reasoning and

understanding people... Why don't you teach them how to think well, how to engage in discussion civilly and to listen and then take what people say and maybe empathize?

Her reference to discussion here was somewhat surprising to me. I asked whether she personally felt there was a link between engaging in discussion and citizenship, and she said:

I think there definitely could be a correlation there. It has to be done right though. I mean, I think teachers need to be well-trained in how to do that. And, and I think, you know, the agenda needs to be not, I want to create little people that think just like this.

Ironically, this vision of what discussion looks like in the classroom, without an agenda where you "want to create little people that think just like this," does not align with the way Sabrina describes her classroom practice surrounding discussion. Despite initially defining discussion as "the free sharing of ideas without judgment," Sabrina defines the discussion that is happening in her classroom in this way:

In a teaching role, with the interactions I have between my students... I feel like there's less... of this free flowing discussion... but I still do include discussions in my classroom. I mean, we still do talk about things, but it's, like I said, it's more of a guided discussion and less of just a free flowing, let's just exchange ideas.

This distinction of "guided discussion" and less of just an authentic "free flowing... exchange of ideas" will appear later as I observe Sabrina implementing some of the discussion based strategies introduced in this study. When she refers to guided discussion, it often appears she has an end goal in mind, a destination she plans to lead students to especially as it relates to one of her goals for engaging in conversation, "trying to help develop [students] character and help them to develop a Christian worldview." She does say students do not always have to agree with her:

I guess it depends on if it's a clear case of this is a good or a bad thing, you know what I mean? But you know, it's okay for them to disagree too. I mean as long as they're willing to provide a rationale and a reason for their beliefs and you know, you also have to be careful too, that you don't let, cause at third grade, sometimes they don't think through clearly the implications of their statements.

But she goes on to say:

I'm trying to lay groundwork for, you know, I want [students] to be able to know there is black and white in the world, you know, there's good, there's bad...

This statement implies that, at least in her elementary school classroom, there is space for disagreement, but ultimately, Sabrina's goal as a teacher is to impart what she sees as universal truths to the students in her class.

Interestingly, as briefly mentioned earlier when discussing the reasons Sabrina chooses not to engage in discussions, Sabrina was also the only participant who touched on the idea of making sure discussions are "appropriate" for elementary students. She said:

If I am going to be broaching a topic that I know could potentially go against what their parents believe and have been teaching them, then I often will redirect them back to the parents in those instances, because I don't want their parents to come back and say, like, this isn't what we teach. Do you know what I mean? And so I want to be sensitive to that. And that's you know, it's, I guess you would call it just like you have some cultural sensitivities... And so, you know, [the school] believes certain things are right and certain things are wrong and, and, you know, on the big things, we all agree, but some of those minor things, I'll let [a middle school teacher] deal with that in sixth, seventh, and eighth grade, you know, they'll broach all those fun topics. It's probably not appropriate

as much for third grade. So age appropriateness and then parents... I try to be sensitive to them.

During: Professional Development and Observations

Being the Best Student. From the beginning of the first professional development session, I had the distinct impression that Sabrina wanted to be seen as the best student in the class. She was eager to answer questions, but I often felt she was trying to answer the questions the way she thought I wanted her to. For example, because Sabrina and I have worked closely together as third grade teachers in the past, we have often shared teaching ideas and written units together. While answering questions during the first professional development session, rather than thinking of new examples, she used an example from a lesson we had previously written together. This seems to demonstrate her desire to be seen as the best student: she knew she had the "right" answer, because it was an answer she had worked with me to create.

This desire to please also appeared in the classroom observations. Prior to being willing to even schedule the first observation, she asked me for help composing a question to use for the lesson. Together, based on a shared knowledge of the school's third grade curriculum, we came up with the question "Is it possible to change what people think?" Then, during the first observation, as I watched her set up, she asked me how to set up the desks and where to have students stand/sit, again, seemingly out of a desire to do things "the right way" or the way I expected. Additionally, at the end of the second lesson, Sabrina said "I thought that was productive." While I wasn't entirely sure what she meant by this, this statement seemed to be a request for positive reinforcement; when she said this, she expected me to agree and provide feedback affirming that she was doing things right. Later, in our follow up reflection interview, when I questioned what she meant by that statement, she said she felt the discussion had been a

"good use of time and accomplished what we needed to accomplish." In this instance, however, despite her desire to please/be the best student, her outcome or her vision of success was different than what I felt had been modeled or expected.

Interestingly, this desire to please or to be the best student was mimicked by her students. During the philosophical chairs discussion (which Sabrina entered as a participant), multiple students referenced her opinion and came back to it many times. They, too, seemed eager to please their teacher by participating in the lesson in the way she expected and reinforcing her viewpoint. This type of interaction between teacher and student continued throughout each observation. During the final observation, implementation of the fishbowl, Sabrina mentioned how students "wouldn't really talk unless [she] gave them some eye contact," which seems to reinforce the idea that they were seeking approval from the teacher.

Finally, throughout each of our seven interviews, Sabrina consistently used the phrase "you know what I mean?" "you know what I'm saying?" or just "you know?" repeatedly. In fact, in 170 minutes of interview time, she used a variation of this phrase 587 times, an average of 3 times per minute. A majority of the time that she used this phrase, she seemed to be seeking positive affirmation of the point she had just made, trying to gauge whether she was "on track" with the answer that would align best with what I hoped or expected her to say. Even if you consider the "you know" to be a verbal pause, there are still 49 times that she completes the phrase "you know what I mean/I'm saying?" looking for affirmation. This seems to verify the assertion that being the best student, or at least openly receiving positive affirmation was critically important to Sabrina and the way she engaged in these professional development experiences.

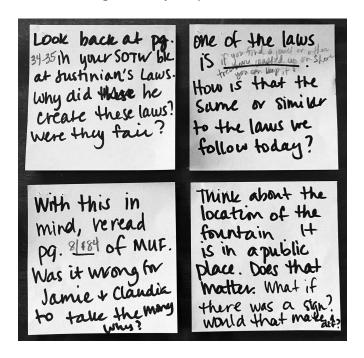
Seeks Help. In addition to examples referenced above where Sabrina asked for help that also exhibited a desire to please, she was open and honest about her desire to receive additional support and help throughout the study. In response to the second professional development, in our follow up interview, Sabrina was positive about the training but did not feel fully ready to jump into the technique, saying:

I still feel like I would need some assistance from you, like to help me formulate questions to scaffold the thought process from, from the, you know, the intro to the larger group discussion. But I feel like, you know, with at least once or twice having given that a shot that I think I could, I could implement it. But I definitely think I would need more help besides just having heard the training, you know what I mean? Like to, to formulate, like how to make it applies to something that I'm teaching directly, you know? I mean, I kind of have some ideas, but I feel like I definitely need more assistance in that area until I feel comfortable.

True to her word, after all three professional development sessions and before I observed in her classroom, Sabrina came to me asking for additional guidance as she worked to develop questions to use when leading her classroom discussion. When discussing the second discussion strategy, the pyramid discussion, I jotted down some sample questions on post it notes to demonstrate tying in previous knowledge and building from fact based questions to questions that required a deeper level of thought (Figure 4.4). While I meant for these to serve as a starting point for thinking about how to plan for the discussion and expected Sabrina to adapt them, when I showed up to observe the lesson I realized she was using the literal post-it notes as they were to guide the entire lesson.

Figure 4.4.

Post-it Note Questions for Pyramid Discussion



Note. Post-it notes used by Sabrina to lead the Pyramid Discussion.

This happened again in the third lesson. Sabrina had a general idea of the question she wanted to ask, but in our follow up interview, when I asked how many questions she had planned, she said "That's what I wanted to talk to you about..." While we ran out of time in our interview to finish planning out specific questions, she said "We can talk about this more after school today." After school, we worked up a set of questions, again written on a post-it, and again she used the post-it while facilitating her discussion. In retrospect, I realize a large number of her questions centered around creating the right questions, as if creating the right questions was the central or even the only component necessary to successfully implementing the strategy. She said:

As long as I have my, my questions in place, I feel like I can, I feel like I could [implement the pyramid discussion]. Yeah. I mean, as long as you help me get the questions surrounding whatever we decide we're going to present...

However, although Sabrina occasionally acknowledged a struggle with facilitating discussions, saying things like "I was like, oh, I don't know how to turn this ship back around and get back to something more useful," she rarely asked for help managing the conversation. When the strategy didn't go as expected, she often blamed external factors. After the philosophical chairs discussion, she said "I think that [topic] was a little bit, a little bit much for third grade brains to wrap around." In this situation, she shifted a perceived failure of the discussion to immaturity on the part of the student rather than her implementation of the technique. However, in my observation notes from the same lesson, I wrote "[Sabrina] didn't feel super prepared... [the topic] could have been contextualized better." This experience varied wildly from what I observed in second grade. While, as noted earlier, Faye used preexisting questions that were not always authentic, she focused a large part of her attention on preparing students to engage in the strategy and was successful implementing the technique. On the other hand, Sabrina sought help to craft the perfect questions but did not always fully prepare students to engage (as noted in the next section) and, based on my observation notes, found less success as a result.

However, throughout the course of the study, Sabrina also showed growth, moving beyond needing help and beginning to talk through solutions to some of what I witnessed as problems in her classroom, initiating those conversations on her own during the observation reflection and coming up with alternatives without my help. For example, in my observation of her pyramid discussion, there was some confusion surrounding a group reading. I planned to

mention this to her, but before I had a chance, Sabrina brought it up in our second observation reflection, saying:

I mean, like when we read the *Mixed-Up Files* stuff, like both groups just had to read it simultaneously, we're in a small class and then you couldn't really intimately read it to your group and discuss so much. Well, we were, we were able to discuss, but it was, it was almost like we needed to like, be in separate parts of the, I don't know, somehow separate a little more, but it was fine. I mean, it was fine. Or maybe I could have just read it out loud to them or something would have been another solution.

This quote provides a nice example of the way Sabrina started to think about her practice and problem solve on her own rather than constantly relying on outside feedback.

Lack of Experience and/or Preparation. Despite her desire to be the best student and actively seeking out opportunities to help improve her practice, Sabrina's ability to implement new strategies appears to be negatively impacted by her lack of experience. Because Sabrina entered her teaching career without any formal education training, many fundamental teaching tools seem to be missing from her repertoire. This lack of formal training was visibly missing during the lessons I observed.

When observing the first discussion strategy, philosophical chairs, even though we had previously discussed sitting in a circle outside of the desks, she directed students to stand in clusters based on how they felt about the statement. As a result, students walked around during the entire activity, and many did not appear to be listening or engaged. While she did put up signs outlining expectations for the discussion on the board, which included sayings like "Please be respectful of others' opinions," "You need to listen and make eye contact with your peers," "You must rephrase the last statement that was made," she did not direct student attention to

these signs or discuss expectations for the activity. Further, the discussion lacked depth which I attribute to a lack of student preparation, not contextualizing the question well or situating it within the content it was meant to be in conversation with, and a lack of focus on why this question was being discussed.

During the second lesson, Sabrina asserted that, even though the professional development session had to be held via zoom, it was useful, saying "I really like when I get to do implementation of [new] strategies. Implementation to me is super helpful." However, despite this, in implementation of the second discussion strategy, I continued to witness similar issues. For example, Sabrina started giving instructions for the first step in the activity before students had given her their full attention and some were still talking the entire time she explained what they were about to do. In direct contrast to the other teachers in the study, Sabrina did not introduce the activity as a pyramid discussion or provide an overview for the activities they were about to engage in even though she mentioned a reason she liked this technique was because of the step-by-step nature that unfolds in a structured manner. Additionally, in reflecting on the experience, Sabrina admitted that she had not given any thought to the groups that students would be placed in for the activity (groups were based solely on student location within the room) despite specifically saying in our professional development reflection "If I pair them up right, I think it would be good. In the beginning, pairing up together to get this conversation rolling is important."

In the final lesson, this trend continued. While she did explain the fishbowl technique, she appeared not to have fully thought through how she wanted it to unfold. While explaining, she mentioned that students might want to take notes and then much distraction occurred as she decides to pass out paper to take notes which appeared to be unplanned. Additionally, as in

previous lessons, she started the lesson before all students were fully engaged. In our reflection interview, she did acknowledge she was not fully prepared, but suggested part of the problem was the students, "Third graders are not as mature as fourth and fifth graders; they often don't understand the concept... and they're also not sometimes the greatest listeners, you know?," and then referenced the questions, saying: "I also think I need to format the questions a little differently though." However, looking at the experiences of other teachers and students in the study, it seems possible that a lack of exposure to basic education philosophy and classroom management strategies negatively impacted the implementation of these techniques in Sabrina's classroom. While Sabrina frequently seemed to feel the strategy had been implemented successfully, using Hess's (2004) characteristics of effective discussion, I did not observe all seven characteristics present in Sabrina's class discussion. Unsuccessful implementation of the strategy makes it less likely that it will be attempted again or internalized as knowledge that can be relied on in future lessons. In our final interview, Sabrina did share that, outside of these formal observations, she had not used any of these strategies in her class a second time.

Need to Control Versus Lack of Control. As Sabrina attempted to implement these new discussion-based teaching strategies in her classroom, it appeared that a competing demand prevented her from being able to fully engage or fully implement strategies the way they were intended to be implemented. The class Sabrina taught this year is known for being a notoriously difficult class within our district and includes multiple students with learning differences or behavior issues. This is one of the reasons Sabrina asked to take an online class about working with students with ADHD last summer, and more than once in our interviews, she mentions the personality of the class, saying things like "I definitely have some [in this class] that just want to dominate, just want to dominate the discussion, you know? ... I don't have a whole lot of quiet

ones, as you are well aware" and "they did, like I said, act quite restrained for this, for this particular class during this discussion." Sabrina's lack of education experience, as outlined above, and/or the difficulty of this specific class may be why, throughout all three of my observations and in the follow up interviews, Sabrina appeared to reach for control while not being able to fully grasp it. This lack of control seems to have led to modifying the discussion methods in ways that prevented students from engaging in deep discussion and continued reliance on the teacher as the authority with whom all the information lives.

In implementing the first discussion strategy, Sabrina very intentionally controlled the experience, leading the discussion by calling on students who raised their hands as well as participating in the discussion by serving on the agree side. These actions are not what was modeled during the professional development session. Due to Covid-19 quarantine restrictions, Sabrina also had two students who were participating virtually. At the end of the session, she said "it was really hard" for the online students to participate via zoom, but in the middle of the discussion, she muted them for talking when she did not want them to talk and then did not acknowledge their presence again. In reflecting on the experience, she said:

Sometimes I feel like, you know, as long as I can keep everybody on task and that's just a teacher thing. I mean, you just gotta keep them... and maybe also having some accountability is maybe, you know... If they get a blank paper and I can walk by and be like, why is your paper still blank? You know what I mean? I'm kind of like, you're obviously not discussing here.

This comment was fairly confusing to me for a few reasons. One, in this particular lesson,

Sabrina asked them to fill out the pre-debate organizer I shared, but she did not have them taking

notes during the discussion. Referencing this is odd but speaks to the level of control she wants

to maintain. She needs to have a tangible way to be sure students are doing what she has directed them to do. In the third observation, even though it was not modeled, she spontaneously directed them to take notes again. This action seemed to be more distracting than helpful but, based on this conversation, seems likely meant to act as a way she can visibly see students are "on task." Second, the language she uses here "I can keep..." seems to indicate an attitude where the teacher is actively looking for ways to maintain control of the classroom. This is apparent in other comments as well. For example, she frequently says thinks like "sometimes I felt like I had to, you know, kind of direct them away from some of that fantastical," "if I pair them up right," "this is a good tool for me to make them," and "when I wasn't per se calling on them, but I was just kinda like looking at them like, hey."

The idea of control lines up with Sabrina's specific responses to the discussion strategies themselves. In talking about fishbowl discussions, she says this technique is valuable because it "definitely gives you (the teacher) more control." However, this interpretation seems to be an alternative perspective that did not appear in the behavior of other teachers in this study.

Allowing students to participate in authentic discussion during the fishbowl requires that the teacher engage as a participant. Sabrina choose not to do this, instead sitting on the side of the circle, calling on students to speak if they were inside of the circle but had not spoken, directing students to cycle in and out, giving students "eye contact" in an attempt to have them act in a specific way, and speaking in between each students comment. None of these behaviors were modeled during the professional development session and it seems as though the competing demand of maintaining control in the classroom prevented Sabrina from implementing the technique as intended.

Beyond directly controlling the behaviors of students, it also seemed to be important to Sabrina to direct the direction or the end goal of the conversation. In the professional development sessions, when we discussed authentic questions, we talked about developing questions that have no right or wrong answer but allow students the opportunity to have weighty conversations and grapple with hard ideas. Contrary to that idea, when I spoke with Sabrina about the goals of her lessons or why she paired strategies with specific techniques, she often seemed to have a specific destination in mind - a clear right answer. This was especially apparent during the pyramid discussion. During our post observation interview, Sabrina articulated the following as the purpose of this discussion about the book *From the Mixed-Up Files of Mrs*.

**Basil E. Frankweiler* (Konigsburg, 1998):

I really wanted the students to think through more seriously what it meant to bathe in the fountain and take the money from the fountain. Because I feel like before there were only two or three [students], it was just like, oh, this is wrong. You know? And the rest of them were like, ah, no big deal at all. It's free money. You know what I mean? They just, I don't feel like they were really thinking about it morally.

She planned this discussion in direct response to student answers on a test they had taken the previous week:

Because we, you know, when we read about it in the story, and then also then when we tested on it on our test, there was a question, an essay question on the test that said, how did they get extra money? How do you, you know, is that right or wrong? Why? I had a, I felt, a surprising number of students were just like, it's fine. You know, it was fine for them to do that. No big deal. So I wanted them to think more deeply about it... And in this idea of, of laws and, and morals, like what drives our behavior, not just as against the

law, but is it right or wrong and how we need to consider these things at all times. So I just thought the discussion went like I hoped it would.

Because she felt that taking money from the fountain was morally wrong and not all of the students in her class agreed, she planned a discussion with the intent of convincing students that she was right. In this discussion, ideas that would complicate the concept of stealing (like hunger or poverty) were not introduced. Further, she intentionally set up the groups for the pyramid discussion to help students arrive at her own conclusion:

I tried to divide up two girls in each group so that they would have female voices.

Because honestly my girls were the ones that were saying the money, taking the money from the fountain is definitely wrong, like the whole time. And it was most of the boys except for one that was like, it's fine. You know? And so I wanted to kind of divide up those voices amongst the larger groups too.

In the end, she felt all but one student agreed with her perspective and so, ultimately, she thought the discussion was useful. In fact, as mentioned earlier, when I turned off the recording, she immediately said "I thought that was productive." When prompted to explain what she meant by that, one of the things she said was:

I like to have a strategy of teaching where I am taking [students] on a journey, but to a specific destination, you know what I mean? It's useful to me as a teacher in, at the [elementary] level to know hopefully where this discussion will end up.

Putting these together, it appears Sabrina views a discussion as productive when it leads to the destination and outcome she desires. In the third observation, this same theme emerges. Sabrina started the discussion with a specific destination in mind. She told me her "goal for the lesson

was to get them to go from this holding a grudge concept to unforgiveness... and we didn't quite get there, but we got close."

Along those same lines, she often referred to the use of discussion as a "useful" tool. For example, in the first discussion, she said "some of it was a little off track... and that wasn't really too useful. But there was some of it I thought was helpful and it was good." In a later interview, she said "I think that the pyramid strategy could be useful as long as it's done under a controlled environment in my classes." From these comments, we see that Sabrina is willing to use discussion as a tool as long as she can control student behavior and as long as the final destination of the conversation leads to where she wants it to go - as long as it is "useful," which seems to be defined as convincing students to agree with my opinion. However, during my observations I noticed that as soon as students reached Sabrina's end destination for the conversation or when behavior progressed to the point she could no longer control it, the discussion was promptly ended.

After: Post-study Reflections

Evidence of Change. Like Trista, Sabrina's definition of discussion remained the same, but her definition became a little bit more nuanced, adding an emphasis on a goal of students deepening their understanding of the topic at hand; however, she also mentioned "the free flow of ideas *from me* to the students" (emphasis added by me). This may have been a slip of the tongue, but based on the categories above, it seems that over the course of the study it is possible one factor of discussion based strategies Sabrina erroneously internalized was a picture of the teacher in a position of authority and control. However, it may be inaccurate of me to arrive at that conclusion as in our post study reflection, she also shared her opinion that "many students will learn better if they think things through, in a discussion format, rather than just receiving

information from [the teacher] and writing it down, you know, and then regurgitating it later on the test."

When discussing specific ways she incorporates discussion in her classroom, Sabrina's answer also shifted. In the initial interview, she shared questions she previously asked her class during specific subjects. In these situations, while she said her class engaged in discussions in response to these questions, she does not share examples of the ways students engage. In contrast, in the post study reflection, she specifically names the discussion based strategies she uses, like the pyramid discussion or value lines (a technique I shared with her during the previous academic year and was not part of the study). In our initial interview, Sabrina did not have the ability or language to articulate specific strategies, instead equating "discussion based teaching strategies" to the teacher saying "let's talk about a topic" with no other supports in place.

Sabrina also seems to have widened her view about why she might choose to engage in a discussion. In the initial interview, she mentioned engaging to learn new information, convey information, or hear from someone else. In the post study reflection, she suggested different types of classroom discussions have different goals, like gauging retention of information, reminding students of something they have learned previously, thinking more deeply about something they have read, or drawing parallels from information they have learned to their lives. This growth appears to indicate that Sabrina has moved past thinking about discussion as "Let's talk about a topic" to a strategic pedagogical technique that can be implemented to achieve specific results.

Perception of the Learning Experience. When asked about her perceptions of the professional development learning experience, Sabrina said:

Learning [discussion based teaching strategies] at our inservice was helpful and actually participating in them in inservice, doing the actual activity instead of just hearing the theory of the activity was extremely useful, but having to do it in my classroom was the most useful as far as learning how to do it. I mean, I did get support from you helping me format the questions maybe in a way like, which, I mean, it was still like, I came to you with like, I'm going to do it for this particular topic or this particular subject. And then you helped me to come up with some ideas on how to, to get the conversation moving. But I feel like now that we've done it, I can do it again. You know, I'm more likely to implement it in my classroom again, having done it just the one time and also to see which strategy might work better with which topics. There's a lot of options now, which I, I mean, options are good, good to have options.

Like Faye, Sabrina does not mention the post professional development interviews and the observation reflection interviews as part of the learning process; however, she does call particular attention to receiving the help she needed when she needed it and suggests that the support provided throughout this academic year was enough that she will be able to use these techniques again in future years without additional help. Later, she elaborated on this further:

I think that a learning inservice where you actually practice and you're followed up with, and you're encouraged to implement the things you've learned and not just encouraged, but basically like I'm going to come observe in your classroom. You're using the technique and I'm happy to help you, you know? Tell me a subject that you think might work with what you're talking about. And I'm happy. I mean, like, how you did that with me helped give me the confidence to start these discussion strategies. And in a way that I may not have done on my own, you know? So I think having some support was really

useful and someone to help me get the ball rolling with that little bit of formatting, you know? And I feel like once you've done it, you can do it again.

This statement provides some additional insight into the way Sabrina learns and internalizes new information as well as how the design of the professional development sessions impacted Sabrina's reception of new information.

Bonnie

Mrs. Bonnie Clark teaches a fourth-grade class with 16 students. She earned her undergraduate degree in Elementary Education from a large public university in the south and is currently pursuing her MS in Christian Education online. She has taught upper elementary students, fourth through sixth grades, for a total of ten years. Bonnie was the most reluctant participant, responding after the final announcement, agreeing to participate "if you still really need more teachers."

Before: Personal Experiences with Discussion

General Feelings About Discussion. In our initial interview, the first thing Bonnie said to me was "I'm not very good at leading class discussion," setting the stage for the rest of our interactions throughout the study. She continued, "I don't like waiting for answers and often there's a child who's willing to just give an answer and I can move on with my life. And that's not what discussion is." When I asked her to define discussion, she said "having a conversation about a topic or a big idea." In her everyday life, Bonnie generally does not enjoy engaging in discussion because she does not like to discuss ideas with people who think they are right. She also does not like the conflict she feels often accompanies discussion. She says "people don't actually know how to speak well to each other or speak politely... I have this like negative idea of people" and she expects when a discussion starts, it will end with disagreement or conflict.

This response was wildly different from that of the other three participants and exposes a new perspective to consider. Unlike other participants, Bonnie did not communicate that engaging in discussion was an important part of her life. However, when I asked Bonnie to think about times in her life where she engaged in discussion outside of education experiences, her tone changed. She referenced small groups at church discussing scripture, trying to intellectually understand a topic, discussing life and work problems with friends, or problem solving difficult classroom situations with coworkers. When discussing the last topics, Bonnie says, "we often have tea here in my classroom and talk... those are fun."

But there are also times when it is not fun for her. Bonnie will intentionally choose not to engage in conversations when she feels that she is being judged or when she does not feel fully prepared:

I try to avoid any time when I'm going feel like I'm stupid, or someone's going to think that I appear stupid or something like that... I don't like discussions where I... might not have felt super prepared for the level of what these people were wanting to talk about as well. I don't want to appear wrong... I don't feel like I should say things if I don't understand, or I don't have a good enough, well-developed opinion to speak.

These general feelings about discussions seem to stem from the education experiences she had as a student, outlined in the next section, and have impacted the pedagogical strategies she chooses to use as a classroom teacher.

Education Experiences with Discussion. Throughout her PK-12 education experience, Bonnie remembered participating in discussions, but her perception of these discussions was negative. She said:

I feel there was a time [in high school] where like we had a discussion and you had to make sure that you spoke this amount of times and it was like checking off the list. And so everyone was just trying to jump on top of each other. And there was no actual conversing happening and it was just I have this idea and I have this idea and I have this idea and I don't remember what it was about or anything. I just remember thinking I know I need to do these things that I've been told to do, but it doesn't actually feel like we're doing anything productive.

Based on this experience, it sounds like Bonnie was exposed to a sort of structured discussion strategy as a student, but because the discussion was not authentic, the experience had a negative impact. Later, as a freshman in college at a large public university, Bonnie had a similar experience:

[I] had a discussion class that I went to the wrong one the first day and stuck with it and just transferred cause I liked it so much, but there was like a weekly discussion time where you had to come and be prepared to talk about any number of things from the reading. And I remember not always feeling prepared for it because I didn't understand the reading, and then I also felt like there were people there who wanted to be in charge of the discussion and say all the things. And it was hard to speak when somebody thinks that they can talk the entire time.

Later in her college experience taking specific courses required as an elementary education major, Bonnie said "I remember talking about how discussions were important in a classroom and teaching lessons less about the content and more about having kids think through the important ideas." However, despite this emphasis on teaching with discussion, she said "I don't remember having outright discussions" as part of that program.

In thinking about whether her educational experiences prepared her to engage as a citizen, specifically as it relates to discussion, Bonnie seems to be unsure:

No, I still don't feel confident speaking in a conversation if I don't feel confident about it, but I, if I do. So, yes I guess. Because sitting around having tea, I'm not at all afraid to say what I think about anything because I actually feel competent at this job. So I feel I can speak... that idea of feeling like needing to be prepared or feeling like I'm confident in an area allows me to feel like I can speak in a conversation. But I also don't engage in conversations a lot because I don't want to.

Moving beyond her experiences as a student, in our initial interview, Bonnie suggests that as a teacher she does infrequently use discussion in her classroom, but not structured discussion techniques. She is able to provide examples of subjects they discuss, like how John Locke's big ideas apply to the American Revolution and whether it is ok for the king to disrespect his citizens. In referencing this topic, she says "It's really fun to watch their little minds make those connections..." She follows this with "and I think that's why I wanted to be able to get better at [leading discussions]," providing a rationale for why someone with such a negative opinion of discussion would choose to participate in a study centered on discussion.

During: Professional Development and Observations

Lack of Support and/or Confidence. As mentioned in Chapter Three, although Bonnie was present at all three professional development sessions, I did not have a chance to observe Bonnie implementing any of the techniques introduced during the professional development session. However, I was able to observe the ways in which she interacted during the professional development sessions. One thing I noticed is, as much as possible, Bonnie tried not to be part of the discussion experiences. For example, during the fishbowl discussion when I asked for "four

very brave volunteers" to begin our discussion in the middle, she volunteered first under the guise that she wanted to get it over with and did not choose to participate again. She also frequently made comments that suggested she was skeptical about the role discussion might play in the classroom, primarily having to do with the idea that, in her experience with discussion as outlined above, just a few students dominated the discussion, talking just to hear themselves talk.

Beyond this visible skepticism, during the post-interview, she mentioned that part of the reason she chose not to participate in observations during the study was that she did not feel fully confident implementing the material taught. Specifically, Bonnie shared that when I requested time to observe in her classroom, she would look at her lesson plans and feel like she could not come up with a single question to use for discussion during the weeks I emailed her. In her opinion, it felt easier to opt out of the study than to try to work through the felt need of not having additional support. This is explored in greater detail below.

After: Post-study Reflections

Evidence of Change. As mentioned previously, although Bonnie chose not to participate in the study throughout the year and I was unable to observe her teaching any lessons, she did still actively participate in all three of the professional development sessions. Because of this, I asked if she would still be willing to meet with me for a post study reflection and debrief the professional development sessions she engaged in throughout the year.

When I initially asked Bonnie her general feeling about discussion in the fall, she said "I'm not very good at leading class discussion." This time, however, she led with "kids talking to each other about various topics of information or questions that we have for them." Similarly, her definition moved from "having a conversation about a topic or a big idea" to "a conversation with a purpose." Given that in our initial interview she frequently said of discussion "it doesn't

actually feel like we're doing anything productive," when taken together, these demonstrate growth that happened over the course of the academic year. However, she still does not feel like discussion is an important part of her life because she is "really introverted" except as it relates to her classroom, an area where she feels confident.

Despite not participating in any study related observations, Bonnie said:

I like some of the ideas you brought to us and so I want to do it more... I don't feel as afraid of it as I did at the beginning of the year and our first conversation. And I still, I don't think I did enough or any of it really this year, but I don't think I won't in the future... I feel like [having discussions with young children] is more approachable or more something that I can engage with.

While it remains unknown whether Bonnie will implement these strategies in the future, some of her attitudes do seem to have changed as a result of the professional development sessions.

Perception of the Learning Experience. When asked about her perceptions of the professional development learning experience, Bonnie said:

You told us about discussions or like what specific type we were doing, and then you had us like discuss something based on something we were learning or like something like third, fourth or fifth grade covered throughout the year and in second grade too. So you would give us a topic and we would practice the method that you had taught us and then you would give us resources and have us discuss that discussion at the end...and give ways that we've used it in the past or questions that we have about using it in our classrooms. You made it personal.

While Bonnie covered all the steps that occurred during the actual professional development session, she never participated in any interviews or observations so that part of the experience was unknown to her. As mentioned previously, Bonnie was hesitant to participate in the study from the beginning and chose not to follow through with the interviews and observations throughout the year. At the time she opted out of the study, she was dealing with multiple weeklong quarantines for students in her class due to Covid-19 and attempting to teach in person and online simultaneously. She shared this as the reason she needed to walk away. However, when I asked her for more detailed about why she opted out in our post study reflection, she said:

I didn't feel really confident about [leading discussions] and I didn't feel like I had the bandwidth to like, think through what I could be discussing with the kids... I didn't feel confident about picking topics that we could have discussions about... I had kids in and out of quarantine all the time... but also... you would be like, okay, I'm going to come during this week. And I'd be like, I don't know. I know what we're talking about, but I don't know what we can discuss. Like, I can't think of anything. I didn't have the time to stop and think about it, and then I also just kind of felt like... it's not so much time, but just like the, it didn't seem as important as like trying to get through all the other stuff I had to get through.

When I shared with her that other teachers had come to me for support planning discussions and developing questions, she was surprised and indicated that, although she could not say for sure, knowing that level of support was available may have made a difference in her ability to continue in the study. Along those lines, she said:

I think we need people to be in our classrooms and be building relationships with us so that we can go and say, like, I am struggling to teach this here - what do I do? We also need someone like you... being willing to enter into those conversations with us and to help us, like, problem solve.

Based on these comments, it appears building personal relationships as well as not only access to additional levels of support but also informing teachers that additional support is available is a part of the learning process. In Bonnie's case, the lack of a personal relationship along with not knowing support was available created a barrier to moving forward with implementing the discussion based teaching strategies presented during professional development sessions.

Summary

Throughout this chapter, I present the results of my data analysis. Treating each participant as a case, I systematically evaluated data from all three data sources, including teacher interviews, classroom observations, and analytic memos, using coding to find categories that provided insight to help answer the overarching research question, why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?

For each of the three teachers who fully participated in the study, I first provided a narrative outlining the ways that particular participant described and explained their experiences with discussion before beginning the study. Following this, I share themes that best describe the ways teachers interacted with the professional development sessions and the experience of implementing new strategies in their classroom. Finally, I concluded with a narrative detailing changes in teacher attitude from the initial interview to the post study reflection as well as a brief summary of how each teacher perceived the professional development experience.

My first participant, Trista, could be categorized as a model student. She displayed a lot of excitement about engaging in learning new information. Four categories that emerged around the way she learns included integration of old and new practice, excitement, and a desire to improve, support, and teacher agency.

My second participant, Faye, could be categorized as a hesitant acceptor. She was skeptical whether the strategies introduced would be usable in second grade, but by the end of the study, seemed convinced that discussion is a valuable tool, even in the early elementary grades. Four categories that emerged around the way she learns included a hesitancy to fully buy in, imitation, a need to be ready, and rarely seeking help.

My third participant, Sabrina, could be categorized as eager to please. She is also ready to learn something new if she thinks it will improve her classroom practice. Four categories that emerged around the way she learns included a desire to be the best student, actively seeking help, a lack of experience or preparation, and acting controlling while lacking control.

My final participant, Bonnie, did not fully participate in the study, but a narrative detailing her attitudes toward discussion is included. Additionally, even in the limited interactions we had throughout the academic year, a single category emerged, a lack of support and/or confidence.

While each individual teacher responded to the professional development sessions in differing ways, these responses overlap and intersect in larger themes, including preparation, commitment, relationship, and agency. In Chapter Five, Discussion, I will talk about how these categories fit together and how each of these themes speak to the research question, "Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?" through the development of a theory

which attempts to provide insight into how teachers learn, Embodied Knowing in Teacher Education. I will also detail how this study extends existing literature centered around the ways teachers learn, especially as it relates to professional development experiences. Taken together, these themes have implications for teacher educators considering critical components of effective teacher education programs.

CHAPTER 5

DISCUSSION

As proposed by Bickmore and Parker (2015), even when professional development in a specific instructional strategy is available and teachers want to successfully implement that strategy, they are not always effective in doing so. This begs us to consider how teachers learn and internalize new information about teaching in ways that impact their classroom practice. Is effective professional development, as outlined by Desimone (2009) and Zwart et al. (2015), enough, or is there more to learn and apply to teacher education about the ways teachers construct knowledge? The primary purpose of this study was to consider why some teachers are able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot. Using a qualitative study design framed by notions of intimate scholarship and data analysis rooted in the traditions of grounded theory, I provided professional development for elementary school teachers at a private school. Following each of three cycles of professional development, I met with teachers to debrief the professional development session, observed them implementing the new strategy, and participated in a joint reflection about the teaching experience. Using Glaser and Strauss's (1967) description of initial data analysis, I allowed substantive concepts and hypotheses to emerge from the data on their own as themes. In the previous chapter, I shared these findings, organizing the data by participant. In this chapter, I will expand on these findings by explaining how these themes fit together as categories, each serving as a factor of a larger framework, Embodied Knowing in Teacher Education. I will also make connections to existing theories and relevant literature and discuss broader implications of the study. At the end of the chapter, I outline recommendations for future research.

Summary of Findings

In the previous section, I outlined my findings organized by participants, attempting to holistically look at participant experiences to individually identify how they learn and how they implement new theories or techniques. I found that Trista displayed a lot of excitement about engaging in learning new information. Four themes that emerged around the way she learns included integration of old and new practice, excitement, and a desire to improve, support, and teacher agency. Faye was skeptical whether the strategies introduced would be usable in second grade, but by the end of the study, seemed convinced that discussion is a valuable tool, even in the early elementary grades. Four themes that emerged around the way she learns included a hesitancy to fully buy in, imitation, a need to be ready, and rarely seeking help. Sabrina was ready to learn something new if she thought it would improve her classroom practice. Four themes that emerged around the way she learns included a desire to be the best student, actively seeking help, a lack of experience or preparation, and acting controlling while lacking control. Bonnie did not fully participate in the study, but in the limited interactions and interviews we had throughout the academic year, a single theme emerged, a lack of support and/or confidence.

Embodied Knowing in Teacher Education

There is a distinction between teacher knowledge and knowledge for teachers (Clandinin & Connelly, 2004). While Desmoine (2009) lays out five critical components of professional development, these components primarily focus on aspects teacher educators or those who are designing the professional development should concentrate on: knowledge for teachers. These specific components offer little in terms of thinking about the participants and what they bring, both positively and negatively, to the learning experience. Teacher knowledge, however, refers to the personal practical knowledge of teachers (Clandinin & Connelly, 1987). In a majority of professional development experiences, the degree of uptake of the information provided through

the professional development varies significantly by teacher (Brugar & Roberts, 2017). This supposition held true in this study. While it is possible the differences in uptake were related to internal factors, such as interest or efficacy, as a result of extensive repeated interviews with faculty member participants in this study, I found four overarching categories, aspects of which align with the theory of personal knowledge (Polanyi, 1958) as well as the more nuanced theory of personal practical knowledge (Connelly & Clandinin, 1987), that directly impacted the way teachers engaged in not only the initial professional development experience but also how they implemented new learning after the session ended. All four of these categories are rooted in existing ideas of embodied knowing (Barbour, 2016; Belenky et al., 1986; Grosz, 1994; Merleau-Ponty, 1962) that posit a person experiences themself as a creator of knowledge and also as embodying knowledge, valuing their own experiences as a way of learning along with other strategies.

As a result of these observations, in response to the research question, why are some teachers able to learn (as evidenced by implementation or integration) good technique and good theory into their practice while others cannot, and the emergence of four categories, preparation, commitment, relationship, and agency, I propose an explanatory theory, Embodied Knowing in Teacher Education (Figure 5.1), that encompasses these four categories as factors which appear to directly impact a teacher's ability to learn and implement good technique and/or good theory. Together, these four factors provide a holistic overview of how teachers learn. When one is removed, the circle is incomplete, and the core factor is the development of teacher agency. Individually, each of these four factors is referential to existing theories of knowledge construction which provide a partial perspective but an incomplete picture. To summarize the basic tenets of this theory, I want to first start by defining the words present in the title: embodied, knowing, and teacher agency. Then, in line with the tradition of the grounded theory

approach, I introduce categories as potential factors that lead to the development of teacher agency (hypotheses), grounded in data but tentative pending additional research. Each of these factors is presented alongside data which illustrates how it appeared in the study including interview segments and observation notes to provide evidence which demonstrate how each factor is grounded in the data (Glaser & Strauss, 1967).

Figure 5.1

Theory of Embodied Knowing in Teacher Education

Embodied Knowing



Note. Diagram showing the four factors that make up embodied knowing in teacher education. Arrows from preparation, commitment, and relationship lead to the development of agency as the core factor.

Defining Terms

In the phrase "embodied knowing," what is meant by "embodied" is a visible or tangible form or a concrete example of an idea or concept. Theories live as abstract forms of knowledge, concepts or ideals that, as Plato would say, exist in a higher realm (Diener, 2015). When these theories, or forms, are seen in the physical world, they become part of the visible world, existing as imitations of the abstract ideal. It follows, then, that as teachers implement theory as visible

parts of their classroom practice, however imperfectly, the theory becomes embodied, i.e., becomes a tangible form of an idea. When we, as teacher educators, teach sound theories or strategies to preservice or inservice teachers, the goal is for teachers to "embody" these ideas, to make an abstract concept visible in practice by successfully (but not perfectly) implementing them.

"Knowing" in the phrase "embodied knowing" is meant to refer to internalizing new information so that it becomes part of a teacher's "subsidiary awareness" (Clandinin, 1985; Merleau-Ponty, 1962; Polanyi, 1958). It is not just information that has been heard; continual embodiment of the theory or strategy has led to the ability to effortlessly pull it out as the situation requires and even adapt it to the needs of the students in the classroom if necessary.

Finally, in thinking about ideas of "teacher agency," I want to first acknowledge that many definitions of teacher agency exist. On the surface, it appears the word "agency" has been co-opted and applied to teachers without the field first agreeing on what it means. Rios (2018) defines teacher agency as a teacher's belief that they can "make a difference in the world that includes and extends beyond the classroom or school context... [It] involves a sense of empowerment and a feeling of control over important decisions as it relates to the education of students" (p. 41-42). Emirbayer and Mische (1998) propose agency should be understood as a configuration of influences from the past, orientations towards the future and engagement with the present, and Biesta and Tedder (2006) build on this definition, suggesting agency is concerned with the way in which actors "critically shape their responses to problematic situations" (p. 11). Looking at these existing definitions in relation to the definition of embodied knowing above, I define "teacher agency" as "an empowered positioning of teachers as active

and adept practitioners in their field, embodying knowledge gained in learning contexts through personal judgment and ability to act."

Factors that Lead to Teacher Agency

The responses of the study participants share similarities to different ways we see teachers engage in professional development across the board in previous studies (Callahan et al. 2016; Halvorsen & Kesler-Lund, 2013). While I recognize participants in this study are unique in several ways: their background in teacher education (or lack thereof), the environment in which they teach, and the personal relationship I have with each that allows me intimate access to their teaching and learning environments, my analysis of the experiences of participants in this study allows me to build on existing theories and literature and arrive at four common factors that can be considered in other contexts and can help us, as teacher educators, better understand how teachers construct personal knowledge. Hamilton et al. (2016) suggests:

Since teacher education programs... play out in particular contexts... examination and exploration require inquiries that are grounded in the particular and that value this kind of particularity. Such work that reveals the practical knowing and tacit embodied knowledge that is embedded in context and both develops and is revealed in experience--both in doing and in knowing that emerges in this kind of experience" (p.26).

Despite the fact that teachers enter into new learning with varying experiences and implement this new learning in their very particular context, in each of these participants, we see common factors that exist across these teachers' unique experiences, including preparation, commitment, relationship, and agency. Below, I will describe those factors and their connections to existing theories of knowledge construction and current literature in the field of teacher education, then illustrate how these factors manifested in the study by including examples from my observations, interviews, and findings.

Preparation

In the preface to his seminal work outlining his theory of personal knowledge, Polanyi (1958) asserts "Into every act of knowing there enters a passionate contribution of the person knowing what is being known... this coefficient is no mere imperfection but a vital component of his knowledge" (p. xxviii). Within this study, all of the participants brought their personal classroom experience and individual conceptions of what it means to teach successfully. These life experiences prepared them to enter the teaching profession with unique contributions and ways of constructing personal knowledge, their own personal practical knowledge (Clandinin, 1985) inclusive of all the experiences that make up a person's being, and this personal knowledge significantly impacted the way they themselves prepared lessons as part of their classroom practice.

In thinking about the research question, why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot, ideas of preparation manifested in multiple ways, including entering into learning about a new strategy with a lack of preparation, i.e. without a background in formal education or personal education experience with specific forms of learning, the role of the professional development sessions in preparing teachers to enact the new strategy, and a need to be "ready," or prepared, to implement the strategy in the classroom following the professional development session. The findings from this study indicate lack of preparation, quality of preparation, and confidence in preparation all play a role, positive or negative, in whether teachers are able to learn and/or implement good technique and theory.

Lack of Preparation

Of the three faculty member participants who fully participated in the study, none came from a formal education background and only one had specific education training outside of what is provided by the school. While this may sound surprising, in this private school, this is a common occurrence, and, for this particular study, offers the chance to consider some unique insight. If, as Cochran-Smith and Zeichner (2005) propose, there is not convincing evidence that teacher education programs make any difference in actual teaching practices, is there a difference or a distinction to this study in that none of these participants had a teacher education background?

In a presentation about The Discussion Project, an initiative designed to teach and encourage discussion at the University of Wisconsin-Madison, Hess (2021) talks about teaching university instructors and professors ways to engage students in discussion. She says:

Most instructors in higher education have not gone through formal teacher education like what [K-12 teachers] have gone through and, what's been very interesting to us, and we've had about 500 people go through this training now, is things that you probably learned in your first two weeks of teacher ed are seen as just absolutely astonishing by some of our instructors. So I remember the first time we showed, I think it was think-pair-share... people are like "Wow, who came up with that? That's amazing!" (19:29-20:03).

A similar phenomenon occurred during the professional development sessions provided during this study. A majority of the strategies introduced were completely new to the participants in the study and, as a result, served the purpose of not only equipping these teachers with a new tool to facilitate discussion but also to excite participants about taking these new techniques into the classroom. This was evident when, after learning about fishbowl discussions, Trista said with visible excitement, "This is the perfect way to synthesize our whole year!"

However, a lack of formal teacher education also appeared to impact implementation of the new strategies. This was especially apparent in my observations in Sabrina's classroom where it appears lack of exposure to basic educational philosophy and classroom management strategies impacted the implementation of these techniques in Sabrina's classroom. For example, in the first discussion session, students in Sabrina's class walked around during the entire discussion activity and many did not appear to be listening or engaged. In fact, many students appeared to not have heard the guidelines for the discussion at all because they were still talking while Sabrina was outlining the procedure. This happened more than once in my observations of Sabrina's class and illustrates how teaching is about more than simply delivering content. Day (2012) posits "Good teaching is recognised by its combination of technical and personal competencies, deep subject knowledge and empathy with learners" (p. 18). Here we see an example where technical competencies may need to be improved (in this case, predefined, outlined, and implemented classroom management procedures) to aid in successful content delivery.

Beyond a lack of connection to (nonexistent) formal teacher education experiences, all participants felt the formal use of discussion as an instructional technique was not a part of their personal education experiences. Feiman-Nemser (2012), drawing on Lortie's theory of the apprenticeship of observation, suggests even if teachers recognize the effect of their PK-12 teachers on their present teaching style, they are also probably influenced in ways they cannot perceive, and "in the press of classroom interaction, teachers end up imitating internalized models of past practice, e.g., doing what their second-grade teacher did when they got restless" (p. 31). If personal education experiences are what classroom teachers fall back on when their knowledge of new strategies fail or they are unsure what to do next, the inability to rely on memories demonstrating the successful implementation of new strategies presents a second scenario where a lack of preparation sets teachers up to fall back into what Korthagan (2010) calls custodial behaviors.

In attempting to implement new discussion strategies, Sabrina frequently had trouble fully embracing the new strategy, instead relying on custodial behaviors like asking students to raise their hands during the first discussion and, in the fishbowl discussion, participating from the side and reverting back to the IRE model of discussion which is what she describes experiencing as a student. Additionally, when I asked Sabrina about her experiences with discussion as a student, she talked at length about a professor she felt used discussions successfully but focused mostly on what a great speaker he was, listening to him share personal experiences and how meaningful that was to her, and even reading portions of a book he had written to the class and asking for feedback. In this description, I was reminded of Heilman's (1991) commentary on "The Great-Teacher Myth" in which he describes the "great teacher" as a "hot on-stage" performer" (p. 419). What Sabrina described in her college professor seemed to be less a teacher and more a performer, and I witnessed her engage in similar behavior, participating in the philosophical chairs discussion by serving on the "agree" side. Rather than supporting and encouraging student participation, she jumped in to share her own opinion with the students, and the students were quick to agree with the things she said and build on her assertions. This was not modeled during the professional development session and seems to be a by-product of what Feiman-Nemser (2012) is alluding to when she says teachers are probably influenced in ways they cannot perceive by their own education experiences, particularly ones they perceive as positive.

Quality of Preparation

Throughout the literature, we see research that specifies best practices for developing professional development for inservice teachers. Desmoine (2009) in particular outlines five critical features of professional development, including a content focus, active learning,

coherence, duration, and collective participation. In this particular study, all five of these features were at least partially addressed in the professional development sessions.

Content Focused. Desmoine (2009) defines *content focus* as activities that are focused on subject matter content and how students learn that content. In all three of these professional development sessions, the subject matter content used was taken directly from the curriculum teachers are expected to teach. In the first session, it included references to a book read in first grade and the actual activity was based on a book taught in fifth grade, *The Hiding Place* (Ten Boom, 1974). In the second session, the model lesson was based on a history lesson taught in second grade using resources provided by the school. In the third session, the model lesson was based on a question from a literature guide used in third grade. In all instances, teachers were able to see and participate in examples directly related to the curriculum they taught in their classroom. This was followed by a conversation debriefing the technique and discussing other ways it could be used in the classroom.

The ability to engage in experiences that highlight curriculum used by teachers is important for multiple reasons. First, Korthagen and colleagues (2006) contribute:

What [preservice teachers] experience as learners of teaching dramatically shapes their views of practice... modeling approaches that create opportunities for student teachers to be cognizant of learning about learning and their learning about teaching need continually to be made explicit (p. 1026).

While Korthagen et al. are speaking specifically of preservice teachers, the same is true of inservice teachers. Having the opportunity to participate in learning experiences directly focused on the material they teach while learning about teaching explicitly is a crucial part in preparing teachers to implement new materials or new strategies.

My intentional decision to select examples from the curriculum used by the school as part of the professional development was noted and appreciated by faculty member participants. In describing the learning experience, Bonnie said "you had us, like, discuss something based on something we were learning or, like, something like third, fourth, or fifth grade covered throughout the year and in second grade too." Along the same lines, Trista said "You used a topic from [the school], which was really helpful cause usually we're all pretty familiar with it."

Active Learning. The second critical feature outlined by Desmoine (2009) was active learning, defined as opportunities for teachers to observe, receive feedback, analyze student work, or make presentations, as opposed to passively listening to lectures. This is similar to a principle Zwart and colleagues (2014) suggest should be incorporated when planning teacher learning, practicing in authentic situations. This took place in two ways as part of the professional development.

Initially, active learning and practicing in authentic situations took place as part of the professional development sessions as participants were called on to engage in the discussion strategy that was being introduced. This is a characteristic that participants noted as different from professional development they have been part of in the past. Faye said:

There was a lot of participant participation and discussion and interaction...I liked that [the professional development session] gives us specifics and that we've practiced it. And not just someone out there telling you about something... Lots of times, it's just a demonstration and not so much actually doing the thing. [Doing the thing] works a lot better than just someone showing you a slideshow of the things you're supposed to do and then sending you on your way.

Similarly, Trista said, "A lot of times we'll do professional development and not have an actual example of what we're looking at. So I liked that you had the example of the lesson."

Second, participants also had the opportunity to enact the strategy in their classrooms and receive feedback. Referencing the implementation portion of the professional development, Sabrina said "having to do it in my classroom was the most useful as far as learning how to do it... I feel like now that we've done it, I can do it again." Building on this idea that actually enacting the strategy was extremely helpful, Faye said:

The first time you teach anything or, you know, do anything a new way, you realize what went wrong or what could have been improved upon. So I feel like that's a huge part of learning is doing... You don't really know how to do, [you don't really] learn how to do something until you actually do it.

In this case, the critical component of active learning was not only provided in multiple ways, but teachers also recognized the value of actively engaging in what they were learning.

The opportunity to participate in active learning sits in direct contrast to what many teachers report experiencing as part of their preservice experience (Hawkman et al., 2015). Bonnie, the only teacher with formal education training, shared that even in her elementary education program, she was told to use discussion but she did not remember having opportunities to engage in discussion. This supports what we see in the literature: didactic discussions continue to be the norm throughout preservice experiences (Hawkman et al., 2015) and many teachers arrive in their classrooms with little to no experience of authentic discussion (Parker, 2006a).

Coherence. Desmoine (2009) calls the third critical feature *coherence*, which she defines as content, goals, and activities that are consistent with the school curriculum and goals, teacher knowledge and beliefs, the needs of students, and school, district, and state reforms and policies.

The idea of coherence is similar to what Zwart et al. (2014) refer to as building on the needs and concerns of the participants, in this case inservice teachers. These concepts are seen throughout the inservice sessions in several ways. First, as seen when discussing the critical component *content focused*, the school curriculum is woven throughout the professional development sessions. Beyond that, each session was constructed iteratively, each one building on what was learned in the last but also allowing space for teachers' beliefs and attitudes to shape future sessions. For example, in my initial outline, I had not planned to cover what it looks like to assess discussions, but because that question was asked specifically in the first session, I added it to the professional development sessions, building on the needs of the participants as advised by Zwart et al. (2015).

Sustained Duration. Sustained duration describes professional development activities that are ongoing throughout the school year and include 20 hours or more of contact time (Desmoine, 2009). The professional development sessions in this study did take place over the course of an entire school year as they were presented at each quarterly inservice; however, each session lasted only 50 minutes. Combined with the additional study activities, each faculty member participant who completed the study activities fully averaged between 8-10 hours of contact time, a majority of which was one-on-one.

This one-on-one support that was consistently available throughout the school year was mentioned by the participants as useful when thinking about the ways they engaged in learning during the study. Sabrina said "I did get support from you helping me format the questions... And then you helped me to come up with some ideas on how to, to get the conversation moving." Trista also references this one-on-one support as valuable when discussing what she hoped to get from the observation reflection. She thought she "could have some feedback on

things that I could improve or things that I could think more about before I do my next discussion." While ideally there would have been a greater amount of contact time, both collectively (starting the program in August rather than October) and individually (an increased number of observations and conversations), sustained contact throughout the school year does partially address this critical component.

Collective Participation. The final critical feature outlined by Desmoine (2009) is collective participation, meaning professional development where groups of teachers from the same grade, subject, or school participate in professional development activities together to build an interactive learning community. Zwart et al. (2015) also refer to this idea when they share an approach to teacher learning that promotes engagement at the team and school level. While only three teachers fully participated in the study, all third through fifth grade teachers at the school participated in the three professional development sessions collectively. These 16 teachers include all upper elementary teachers in the district. During each session, after practicing the strategy, teachers would engage in conversation deconstructing the experience. Trista explains in more detail:

Then we would sort of debrief about it and talk about how we could use it in our classrooms and what kind of, what things we would have to alter or change or what might be the pitfalls or things to be ready for.

Working together to construct knowledge that is relevant to all the teachers who are part of this group meets the criteria of the fifth critical component, and multiple participants referenced this as a helpful part of the professional development experience.

Teacher responses to the ways in which they engaged in learning during this series of professional development sessions, especially as it relates to current literature outlining critical

components and best practices, is extremely valuable and demonstrates the role of thoughtfully designed professional development in preparing teachers in ways that enable them to learn (as evidenced by implementation or integration into their practice) good technique and good theory.

Confidence in Preparation

In addition to the preparation (or lack of) teachers bring to the classroom through their personal knowledge and experiences and the quality of preparation teachers receive through professional development, a need to be prepared to engage in and implement new strategies also emerged as a common theme among participants. This need to be adequately prepared to utilize new strategies was not only a crucial part of how teachers learn good technique and good theory and implement it, but also aligns with the characteristics of effective discussion outlined by Hess (2004) which suggest both the teacher and the student must have prepared well.

Need for Teacher to be Prepared. In my observations of Faye during the first lesson, philosophical chairs, there were several instances that demonstrated she had not fully thought through the lesson in advance, beginning with her authentic question. When she realized her question would not match the worksheet she planned to use, she looked at me, unsure what to do next, and said "I hadn't thought about this." However, in the second lesson, she learned from this unpreparedness. In advance of teaching the lesson, she said "The pyramid discussion I think would actually work really well in second grade. I mean I'd have to tailor it a little bit, but I think it would work really well in my class." When observing the second lesson, it was evident she set expectations prior to the beginning of the lesson and as a result of this preparation, both she and her students were better able to engage in implementing the discussion strategy.

However, while Faye was able to work through what that preparation looks like for herself, Sabrina needed additional support. In our interviews, she frequently said things like "I feel like I definitely need more assistance in that area until I feel comfortable," and she seemed

to equate the idea of having good questions to being prepared but did not appear to fully think through other potential needs. In my notes, I frequently recorded observations like: "[Sabrina] didn't feel super prepared... [the topic] could have been contextualized better." Unlike Faye, when the strategy did not go as expected, Sabrina repeatedly blamed external factors rather than unpreparedness despite indications that she was not prepared to implement the strategy. For example, when she explained the fishbowl technique, she seemed to have not thought through how she wanted it to unfold. While explaining, she mentioned that students might want to take notes and then much distraction occurred as she decided to pass out paper to take notes. There seems to be a link here to the lack of preparation mentioned in the beginning of this session. Not having any formal education experience to build on, learning a new technique but lacking a basic foundation, it was extremely challenging for Sabrina to, as Moss (2002) proposes is necessary, set the stage through careful planning and prep work informed by theory and practice.

Need for Students to be Prepared. In a reflection interview, Faye said "Philosophical Chairs; I feel like it requires a level of independence, independent decision-making about [student's own] behavior that maybe they're not quite ready for." Looking at this quote, it seems the preparation of students can be considered in two ways: whether they are mature enough to engage in a specific strategy and whether they have been academically prepared to participate in a specific strategy. In this case, Faye is suggesting her students were not mature enough to successfully participate, but in the same interview goes on to say:

I think if I had coached them a little more, maybe they could have, or maybe if we did it a few different times, but man, they just like looked at me with, like, blank stares. So that kind of surprised me.

This quote observation speaks to academic preparation versus maturity level. Regardless of which of the two we are speaking of, for students to engage in effective classroom discussion, they must be prepared.

Following this initial observation, Faye made significant changes to her teaching practice to better prepare students. In the final observation, which lasted about 25 minutes altogether, Faye began the session by asking students to visualize a fishbowl to help them understand the activity they were about to participate in. She spent almost 10 minutes of the lesson giving instructions for this new activity. This was almost as much time as her students spent in discussion, but her decision to devote a significant amount of time to preparing her young students to participate in a new strategy was successful. In the fishbowl discussion, all the characteristics of an effective discussion outlined by Hess (2004) were present, and this final experience deeply impacted Faye's perception of whether students could engage in discussion strategies and prompted her to say she would continue to use the technique.

Conversely, students in Sabrina's class did not seem to be prepared. In the first observation, students walked around during the entire activity and many did not appear to be listening or engaged, and the discussion lacked depth which I attribute to a lack of student preparation, not contextualizing the question well or situating it within the content it was meant to be in conversation with, and a lack of focus on why this question was being discussed.

Unfortunately, as mentioned previously, Sabrina blamed external factors for this lack of success.

While the need for preparation on the part of the students may seem to be irrelevant to this study on the surface, implementing new learning successfully seems to be a key piece of creating new knowledge/developing personal knowledge and, as literature in the field shows, successful implementation depends on preparation of both the teacher and the students (Hess,

2004; Moss 2002). Sabrina references implementation as a key part of the learning process, saying, "Implementation to me is super helpful." However, while unsuccessful implementation can lead to productive reflection and improvement like we see in Faye's practice, it can also lead to continual duplication of problematic practices without additional support or intervention as we see in Sabrina's examples.

Polanyi's (1958) theory of personal knowledge asserts "Into every act of knowing there enters a passionate contribution of the person knowing what is being known... this coefficient is no mere imperfection but a vital component of his knowledge" (p. xxviii). Collectively, these examples show the role of preparation and specifically the ways a lack of preparation, quality of preparation, and confidence in preparation all play a role, positive or negative, in whether teachers are able to learn and/or implement good technique and theory. Within these examples of preparation, we see connections to Polanyi's (1958) theory of personal knowledge as a teacher's personal experiences with preparation or lack thereof lead them to engage in acts of knowing in unique ways. As teacher educators, we cannot disregard the role preparation, whether imperfect or perfectly planned, plays in the production of new knowledge.

Commitment

In developing his theory of personal knowledge, Polanyi (1958) also asserts "We must always assume, therefore, that some trace of a hidden personal bias may systematically affect the result of a series of readings" (p. 20). Personal bias, based on previous attitudes and perceptions ascertained in the initial interviews, seemed to deeply impact the level of commitment with which teachers entered into the study. This in turn affected their ability to learn good technique and good theory and implement it. Data points surrounding commitment appeared in a variety of different ways, including explicit connections with personal experiences that led to excitement

and a desire to improve, a hesitancy to fully buy in, and usefulness. The findings from this study demonstrate how these three ideas connect to the role of commitment in the ways teachers learn and implement new learning.

Personal Experience, Excitement, and Improvement

Throughout the year of professional development, Trista appeared to be the most committed to learning and implementing new information gained from the professional development sessions. She sat near the front of the room during each professional development session, was an active participant in all three discussions, and thoughtfully contributed to the discussion deconstructing our experience. She was also quick to set a date for me to observe, and sometimes followed up with me to reflect before I had a chance to reach out to her. This commitment appeared to be driven by her positive perception of discussion and a continual desire to improve her practice, and these two catalysts were evident in multiple pieces of data.

When I asked Trista to share initial thoughts about discussion, she led with the perception that discussion is "integral" and "brings joy to a relationship." This highly relational view of the role of discussion as an essential part of engaging in life was evident in Trista's commitment to discussion as part of her classroom practice. Even though she does not always have time to facilitate discussions, she exhibited a recognition that discussions are important. Before even entering into the study, her personal experiences led her to value discussion in the classroom. In college, Trista remembered a lot of times when she was able to engage in discussion based learning, and even though the examples she remembers were not all positive, having any to recall at all was fairly unique to Trista. She recalled an instance where she attempted to use discussion in her class in the past but, in the example she chose to share, this attempt was not as successful as she hoped. As a result of these personal experiences, she was committed to finding a place to

include discussion in her classroom and to improving her implementation of discussion based teaching techniques.

Trista's commitment to improving her practice was evident in the way she engaged with the new techniques she learned. She was the only participant who continued to implement the discussion strategies after the initial observation, successfully integrating them in her teaching practice, and her students were able to engage in sustained discussion that consistently incorporated Hess's (2004) characteristics of effective discussion. While successful engagement in sustained discussion may be related to working with the oldest students, her decision to continue to implement strategies beyond the initial observations appears to be connected to her commitment to improving her classroom practice. This finding aligns with literature in the field. In an article detailing a professional development experience for inservice teachers in the field of social studies, Halvorsen and Kesler-Lund (2013) found three key themes that made lesson study professional development effective, one of which was a commitment to the topic on behalf of the teachers involved.

This desire to improve was also evident in Trista's purposeful request to deconstruct her experience implementing each new strategy together, asking "Did you see anything I could have done better or differently?" Additionally, following this initial philosophical chairs experience, she implemented the same technique 3 more times, each time reaching out to me in some way to again receive feedback. While these conversations speak to Trista's desire to improve, they also provide insight into this research as a form of intimate scholarship. The relationship I have with teachers allows them access to receive feedback and support in a way teachers do not always have with speakers who provide professional development workshops, and I will touch on this more in the next section outlining the role of relationship.

Personal Experience and Hesitancy

In initial conversations with Faye, she shared that as a teacher she uses discussion "in almost every subject [her class] talks about." However, the type of discussion she is referring to is talking about a topic to "recall some information that [students have] heard." From the way she described this discussion, it seems that she is primarily referring to the I-R-E model of discussion defined by Parker and Hess (2001) in Chapter Two. She specifically says she does not implement specific discussion based teaching techniques with second grade students, which may be the result of not having a background in teacher education or not experiencing authentic discussion as a PK-12 student. At the beginning of the study, she was unconvinced incorporating discussion based teaching strategies in a second-grade classroom was a good idea but was willing to give it a shot. Her hesitancy led to a lack of commitment to fully engaging in the study, especially in the beginning, saying things like "I'm a little skeptical about how it will work in second grade if I'm honest. But we're going to try it." In reality, "trying it" turned out to be implementing the new strategy with preexisting questions--hesitancy manifesting as a lack of commitment to fully embracing what was presented in the professional development sessions.

This hesitancy and lack of commitment mirrors what we see in current literature in the field. Halvorsen and Kesler-Lund (2013) point out that teachers must be convinced that participating in lesson study would lead to improvement in instruction or student learning, and Callahan, Saye, and Brush (2016) indicate "buy-in" is in and of itself a major accomplishment as generating an aspiration to improve is one of the biggest hurdles to overcome within instructional reform. Beyond this, Gonzalez (2016) offers:

So many teachers bristle at the thought of PD because most of the time, it's executed so poorly. Although the typical one-size-fits-all format—where every teacher in the building is herded together to listen to an expert speak—has been widely denounced, it still

persists as the default model. Sometimes, if the speaker happens to be engaging, some teachers will walk away with a small tidbit they can apply to their own work. For most teachers, though, it feels like a waste of precious time, time that could be spent developing skills that would make a real difference in their specific practice (para 2).

Gonzalez's perception of professional development seems to mirror the way Faye feels about her previous experiences participating in it, saying "We don't often have examples. So like maybe we were given a broad idea of how to do something or some instruction about something, some theoretical model, but maybe not necessarily put into practice." However, referring to the professional development sessions provided as part of this study specifically, she says "I liked that [the professional development session] gives us specifics and that we've practiced it." Over the course of participation throughout the year, whether through engaging sessions or successful implementation, it appears Faye does become bought in. Hesitancy moves to commitment to the new strategy as she becomes convinced discussion based teaching strategies can work in her classroom, saying in the future, she hopes to schedule them so frequently that "down the line, [she will] be so used to integrating those that [she will] use them naturally."

In addition to Faye's demonstration of hesitancy, Bonnie also demonstrated hesitancy to commit to the study, sharing an outright dislike for discussions in our initial interview but suggesting her reason for participating was to improve her skills at leading discussion. In this case, that hesitancy was likely one of the factors in her decision to drop out of the study, and her negative perception of discussion in the classroom outweighed her desire to improve as she did not attempt to implement any of the strategies introduced during the professional development sessions.

Personal Experience and a Need for Usefulness

In addition to hesitancy, whether the professional development sessions were perceived as "useful" by the participant seemed to be key to maintaining a high level of commitment to the study. As long as the activities participants were asked to engage in appeared useful, they were happy to continue. However, consistent references to usefulness led me to wonder whether participants would be able to maintain a commitment to learning new techniques and strategies they were unable to categorize as useful.

Looking at the responses provided by Sabrina in the initial interview outlining perceptions of discussion next to the ways she engaged in the study at large, it seems Sabrina's commitment to learning new information and implementing it begins and ends with how she values its usefulness to her classroom practice. In our initial interview, she says, when she uses discussion in her classroom it is "more of a guided discussion and less of just a free flowing, let's just exchange ideas." She often appears to have an end goal in mind and, in later conversations, she refers to discussion as useful if it led students to agree with her perspective. This makes sense as one of her goals for engaging in conversation was "trying to help develop [students] character and help them to develop a Christian worldview."

This necessity for usefulness was also applied to the professional development sessions. Sabrina asserted that, even though the second professional development session had to be held via zoom, it was still useful. In deconstructing the professional development experiences, she also said having the ability to participate in the actual discussion experiences was useful. Again, in these examples, it seems Sabrina categorizes things as useful if they help her achieve her goals. If engaging in professional development continues to be useful and can be translated to useful and productive action in her classroom, she continues to be committed to participating in it. However, if she no longer perceives it as useful, it seems unlikely she would be committed to

continuing since there is no benefit. Conversely, from the beginning of the study, Faye was not convinced the topic of discussion would be useful in her second-grade class. This appeared to be connected to her hesitancy to fully buy in, as discussed above.

Polanyi's (1958) theory of personal knowledge asserts "We must always assume, therefore, that some trace of a hidden personal bias may systematically affect the result of a series of readings" (p. 20). Collectively, these examples show the role of commitment and specifically the ways personal experience led to varying levels of commitment, manifesting in a desire to improve, a hesitancy to fully buy in, and a reliance on usefulness. Within these different levels of commitment, we see connections to Polanyi's (1958) theory of personal knowledge as a teacher's personal bias affects their ability to commitment to new learning. As teacher educators, it becomes critical that we build relationships with inservice teachers that allow us access to information about the personal experiences and knowledge they bring to the classroom and the ability to assess their levels of commitment. Using this information to present new techniques and theories seems likely to increase the ability of teachers to learn good technique and good theory and implement it as part of their classroom practice.

Relationship

In his theory of personal knowledge, Polanyi posits that "all knowing is profoundly incarnated in the human person, and there is no impersonal knowing or knowledge" (Poirier, 2011, p. 219). Polanyi (1958) further indicates that, in any field where the endeavor is "knowing," those seeking knowledge should seek out a master/apprentice relationship, deliberately seeking to be influenced by the discipline's finest practitioners. Drawing on this assertion, Meek (2014) proposes that, while personal knowledge is individual in nature, knowing can only be done together with others. While I hesitate to call myself a "master," throughout the

study, teachers had the opportunity to engage in "knowing" thorough a master/apprentice relationship where teachers first engaged in the discussion based teaching strategy with an experienced practitioner, then attempted to enact the strategy under the supervision of the experienced practitioner, then (ideally but, in reality, only in some instances) moved to implementing the practice on their own. This sequence mirrors the example of building personal knowledge in relationship with others provided by Polanyi. The role of relationship in whether teachers are able to learn good technique and good theory and implement it appeared in three distinct ways throughout the study, imitation, support, and reflection, all of which highlight a need for relational development when engaging in learning and implementing new teaching strategies.

Imitation

Segall (2002) says "There is a close - some might argue eerie - connection between how prospective teachers learn and how they teach" (p. 153). In looking at the ways teachers in this study experienced new strategies and then implemented them in their own classrooms, this eerie connection appeared to be present by way of imitating the strategies as presented in the professional development sessions. However, imitation is also a way people learn. Polyani's (1958) theory of personal knowledge says, "All arts are learned by intelligently imitating the way they are practiced by other persons in whom the learner places his confidence" (p. 206) and provides the example of a child learning to speak by imitating his adult guardians. In this section, I want to first talk about the first half of this statement, "imitating the way [arts] are practiced" connecting ideas of imitation to active learning, and then I will shift focus to the second half, "by other persons in whom the learner places his confidence."

Imitation and Active Learning. According to Korthagen (2010), there is a difference between "the nature of the knowledge existing in the minds of teachers that really helps them to

act effectively, and the knowledge as it is taught in teacher education" (p. 99): a noticeable divide between theory and practice. While understanding theory is crucial, it should not be taught in isolation or without providing connections to what this looks like in practice. This may be why Desmoine (2009) highlights *active learning* (opportunities for teachers to observe, receive feedback, analyze student work, or make presentations, as opposed to passively listening to lectures) as a critical component of effective professional development, and, in discussing professional development for inservice history teachers about problem-based historical inquiry and historical domain knowledge, Callahan and colleagues (2016) critique professional development sessions that feature passive learning activities like listening to lectures.

Teachers noticed and appreciated the active learning experiences present in this study. In interviews, teachers frequently made comments like "I liked that you had the example of the lesson," as Trista said, or "I liked... that we've practiced it," as Faye said. Reliance on these practical examples during professional development sessions were evident in classroom practice as teachers appeared to rely on the examples provided as they leaned heavily on imitation in both positive and negative ways—whether the experienced practitioner (in this case, me) implemented the technique correctly or not during the professional development session, the teachers in the study tended to replicate the experience as they experienced it initially.

The opportunity to imitate what was learned in teacher education opportunities stands in stark contrast to traditional forms of teacher education. Korthagen et. al (2006) says:

Traditional approaches to teacher education are generally characterized by a strong emphasis on theory that is "transferred" to teachers in the form of lectures on psychology, sociology, and general education. In traditional models of teacher education, teaching practice is usually seen as the opportunity to apply previously learned theories and lecturing appears to be viewed as an appropriate form of teaching about teaching; this

theory-into-practice view of teacher education is increasingly being challenged for its many limitations (p. 1021).

Responses given by all participants in the study indicate that traditional forms of education they have engaged in, particularly in professional development sessions, almost exclusively rely on lecture and PowerPoint slides and rarely give teachers the opportunity to participate in the learning strategies they are later expected to implement proficiently which is "often counterproductive to teacher learning" (Korthagen et al., 2006, p. 1021). This study adds to the body of work that challenges lecture as an appropriate form of teaching about teaching. If the opportunity to imitate master teachers/experienced practitioners is a factor in being able to learn good theory and good practice and implement it, both preservice and inservice teachers must have the opportunity to participate in engaging experiences that support good theory rather than just listen to lectures about it.

Further, if teachers recreate the learning experiences that they themselves engage in as Segall (2002) suggests, there is a strong chance they will duplicate these lecture experiences in their classroom rather than attempt to use the theories they are lectured on. Korthagen (2006) says "Although student teachers may not have experienced meaningful learning when a particular teaching approach was used, they may well believe that their students will experience it differently when they are the teacher" (p. 1026). Based on this statement, while teachers in the study recognized a need for active learning beyond lectures, if they were to participate in learning experiences that utilize lecture, they are more likely to imitate this later as part of their classroom practice hoping their students will gain more from lecture than they were able to in their past experiences as learners.

Imitation and Relationship. Having examples to imitate rather than lectures about theory may be a critical piece of professional development but having examples to imitate also

Indicates the presence of interaction between two more people as seen in the second half of Polanyi's (1958) statement, "All arts are learned by intelligently imitating the way they are practiced by other persons in whom the learner places his confidence [emphasis added]" (p. 206). Building on Polanyi's theory, Meek (2014) advocates for choosing an individual to guide new learning who is strategically qualified, an expert who can be trusted but who also cares about the human who is engaged in new learning. She posits that the confidence a learner places in the individual serving as a guide is critical to the learner's level of commitment to learning and implementing new information (in the case of this study, new teaching strategies) and without this relationship of trust, any investment in learning is unlikely to pay off. This idea begins to demonstrate how commitment, relationship, and intimate scholarship converge as an intrinsic factor in understanding why some teachers are able to learn and implement new teaching strategies.

Of the four participants who initially agreed to participate in the study, I have a very close relationship with three of them in which they view me as not only a colleague and an expert in the field but also as a friend. We taught in the same building in the same or adjacent grades, and we participated together as peers in staff development, recess breaks, and "faculty fun nights." These three participants are the three who, following the professional development sessions, placed enough trust in me that they were willing to attempt to imitate the things I demonstrated even if they did not feel those strategies would work with their students and even when I demonstrated concepts imperfectly. The one participant who did not attempt the strategies is the one participant with whom I do not feel like I have a personal relationship.

The role of relationship through imitation in whether teachers learn and implement new strategies was especially visible in Faye's interactions. Faye relied heavily on imitation. In attempting to implement the first discussion strategy, she relied on imitation even when it was

not working well rather than drawing from the pedagogical content knowledge she already had as a teacher or the relational knowledge she has about the students in this specific class. In the second observation, at the end of pyramid discussion, Faye returned to the traditional IRE model of discussion (Parker & Hess, 2001) modeling what I had incorrectly demonstrated via zoom for the group at large during our professional development session. However, in the third observation, Faye sensed the needs of her students and did not imitate the strategy as presented. She felt free to modify it from her original plan in the middle of the activity. In reflection interviews deconstructing each of these observations, Faye and I discussed what had worked in her lessons and what had not. Aspects of relationship enabled Faye's growth throughout the study and led her to truly learn good theory and implement it successfully beyond imitation.

Support

Callahan et al. (2016) cite *The Workshop Problem* as one of the known concerns associated with professional development. *The Workshop Problem* refers to the typical time frame of social studies professional development: a one day workshop or several day institute with little to no follow-up or ongoing support. They found, though participants in their study aspired to more ambitious teaching (Callahan et al., 2016), their teacher-support program did not provide adequate support to help them achieve those goals. In the present study, support was available to teachers throughout the year, and this support, provided through personal relationships between the faculty member participants and an experienced practitioner (again, me), emerged as an integral component connected to the role of relationship.

Sought Help. Of the three faculty member participants who fully participated, Trista, Faye, and Sabrina, in the study, two, Trista and Sabrina, regularly reached out to me for support in ways that were directly connected to the study. In fact, from my perspective, additional access to me as a de facto instructional coach appeared to be an essential part of the reason that Sabrina

wanted to participate in the study. She enjoyed extra access to my time and having someone to run ideas by/through, and she was open and honest about her desire to receive additional support and help throughout the study.

Trista also repeatedly reached out to me to request help planning, discuss what implementing a new strategy might look like, and would even text me or ask me to join her at lunch to further discuss. She used each technique multiple times beyond my initial observation of it and almost always discussed it with me in detail afterwards. In our final interview, this access was referenced as a key part of the learning experience:

I think there were a couple of times that you even helped me like think through what questions might be good and that was definitely helpful. And then sort of even the debriefing and talking about like, what, how could I make this better, make this different? That was really good.

Beyond these information conversations, Trista was the impetus for conducting the final reflections together rather than asking teachers to do that independently. She felt additional insight would be gained by jointly participating in the reflection and she would learn from it.

While these conversations speak to Trista's desire to improve, they also provide insight into this research as a form of intimate scholarship. As mentioned in the previous section surrounding ideas of commitment, the relationship I have with teachers allows them access to receive feedback and support in a way teachers do not always have with speakers who provide professional development workshops. I believe this study, in conversation with existing literature about professional development in and outside the field of social studies (Callahan et al., 2016; Desmoine, 2009; Halvorsen & Lund, 2013; Korthagen, 2017), demonstrates a need for teachers to have access to the speakers who present professional development workshops in a meaningful

way. Further, this access could begin to address some of the known concerns previously introduced, including *The Workshop Problem* and an absence of *sustained duration* (Callahan et al, 2016; Desmoine, 2009).

Rarely Sought Help. In contrast to Sabrina and Trista, Faye rarely sought help in planning or preparing for the lessons she presented, instead choosing to use pre-existing questions from worksheets she had already used in the past. While asking for help was not a requirement of participating in the study, it is interesting to note she is the only one who did not ask and, of the three, her questions are the ones that did not move from fact-based, surface level questions to authentic, scaffolded questions. As literature shows, failing to ask students authentic questions is often a reason classroom discussion fails and this was directly addressed as part of our professional development sessions. (Parker & Hess, 2001; Swalwell, 2015).

However, despite not actively seeking help, during our interviews, I sometimes took the liberty of offering suggestions for implementing the lesson even when they were not requested. In an interview discussing the third professional development session, I deviated from the interview protocol to ask Faye how she planned to manage student placement during the fishbowl after she mentioned a concern about "crowd control" but did not ask for help in adapting the activity. After she explained what she had already come up with, I offered an alternative although she did not ask, and ultimately, she chose to use my suggestion.

Again, this example speaks to the role of support: even when teachers are not actively seeking additional guidance, relationships that provide space for talking through ideas with a trusted other can positively impact implementation of the technique. In thinking about the role of instructional coaches considered previously, it is important to understand that all teachers can benefit from support when provided, whether they request it or not.

Unhealthy Support Objectives. The presence of an adjective like "unhealthy" necessitates the existence of the binary, "healthy" support objectives. In this section, I use "unhealthy" to refer to expectations or incidents that were not productive (i.e., did not lead to growth or learning for the participant) or stripped the participant of their integrity or identity. Alternatively, I use the word "healthy" to refer to instances where support did lead to participant growth during which they maintained their identity and integrity.

Throughout the study, Sabrina sought help in a healthy way like asking for help in developing questions. However, from the beginning of the first professional development session, I also witnessed Sabrina seeking attention in what I perceive as unhealthy ways. In these interactions, I had the distinct impression that Sabrina wanted to be seen as the best student in the class. She was eager to answer questions, but I often felt she was trying to answer the questions the way she thought I wanted her to, and throughout our one-on-one interviews, I often found her looking for affirmation rather than genuinely seeking help. From my perspective, Sabrina desired support that included frequent positive affirmation. This appeared to be critically important to Sabrina and influenced the way she engaged in professional development experiences throughout the study.

However, beyond that, Sabrina was reluctant to ask questions that might lead to criticism of her classroom practice. Although Sabrina occasionally acknowledged a struggle with facilitating discussions, she rarely asked for help managing the conversation, instead blaming any failure on circumstances outside of her control. It appeared as though her desire to please and need to be perceived as the best student may have prevented her from requesting help if it could have been attributed to a deficiency on her part in actively implementing the technique.

This example demonstrates a need to be aware of both a teacher's relational health and their individuality, in this case manifesting as what I am referring to as unhealthy support objectives. Meek (2014) says, in an endeavor where learning something new is the goal, "What we are looking to grow is a relationship that makes each particular individual more themselves" (p. 84). Meek goes on to mention the learner should not sacrifice their integrity, and both people who are involved in the relationship should move toward wholeness. In this case, it is possible that the intimate relationship I have with Sabrina is harmful as it appears much of the way she engages in new learning is tied with her opinion of what I personally expect or my opinion of her as a person. This has important implications for us, as teacher educators, as we continue to think through the relationship of those engaged on both sides of the professional development experience.

Lack of Support. The previous example outlines a relationship that does not support healthy growth because it is too much, however, a lack of relationship can also lead to a lack of growth because of too little support. During the post-interview, Bonnie mentioned that part of the reason she chose not to participate in observations during the study was that she did not feel fully confident implementing the material taught. In her opinion, it felt easier to opt out of the study than to try to work through the felt need of not having additional support.

In retrospect, from my perspective as a researcher, this is not surprising to me although I did not consider it when she opted out of the study. At that time, she was dealing with multiple weeklong quarantines for students in her class due to Covid-19 and attempting to teach in person and online simultaneously. I did not question this excuse. But as we talked in greater detail at the end of the study, I realized in many places, the lack of personal relationship I had with Bonnie because of her location at a different campus directly impacted her ability to participate in the

study. She said things like "I didn't feel really confident about [leading discussions]," and "I didn't feel confident about picking topics that we could have discussions about." From my perspective, there was a breakdown in communication between me and Bonnie as I didn't ensure she knew she had access to me as a resource for the duration of the professional development. In our final interview, she specifically said "I think we need people to be in our classrooms and be building relationships with us so that we can go and say, like, I am struggling to teach this here - what do I do?"

Because of the previous nature of my interactions with the other three participants, I had standing relationships with them but I did not take the time to build one with Bonnie. This example demonstrates that building personal relationships, access to additional levels of support, and informing teachers that additional support is available is a critical component of why some teachers are able to learn and implement new techniques and others are not. In Bonnie's case, the lack of a personal relationship along with not knowing support was available created a barrier to moving forward with implementing the discussion based teaching strategies presented during professional development sessions.

Reflection

In his theory of personal knowledge, Polanyi (1958) speaks of reflection as a means through which information moves from existing in the mind as alleged to factual. In my observations throughout this study and laid next to Korthagen and colleagues' (2006) principles of student teacher learning, this assertion holds merit. Referencing a teacher education program at their home university of Utrecht in the Netherlands, Korthagen et al. (2006) says "Reflection is seen as the essential tool for linking practice and theory, and from the very start there is a strong focus on systematic reflection." In the same article, they suggest reflection and experience

are central planks in preservice teacher education, primarily placing emphasis on "reflection and intercollegially supported learning" which "expresses a process view of learning and knowledge, not a product view of knowledge" (p. 1025). The idea of learning as a process (experience/active learning) rather than a product (lecture) as presented earlier is supported in the ideas of Polanyi (1958) in how he describes the construction of knowledge. Moving back to the idea of imitation, Polanyi said a skill or an art is best learned "by example from master to apprentice" (p. 53). Following this observation, the apprentice must then engage in the experience himself "under the guidance of a master" (p. 54). It follows, then, after engaging in the experience, the master and apprentice together reflect on the experience, and we see that play out in this study. Presenting knowledge through a professional development session alone was not enough for participants to be able to internalize new techniques. Implementation alone was not enough for participants to be able to internalize new techniques. In order to truly embody new knowledge, they needed additional support which came through reflections done in relationship after the professional development sessions and the observations, and results from this study indicate reflection and experience (active learning) are also central planks of inservice teacher education.

Reflections completed after the professional development sessions touched on the experience of participating in a specific teaching strategy, but often, as teachers were forced to consider the best ways of implementing the technique in their classes, through their reflections on personal experiences, they made changes and adaptations to the strategy in order to determine how best to incorporate a strategy that sounded good in theory into their unique classroom environments. These changes did not always look the same for each participant. While Trista conducted the pyramid discussion as we did in the professional development session, she also brought ideas to our post observation reflection sessions of how she could modify the structure to achieve similar but nuanced goals for her classroom discussion, effectively creating a new

strategy: the reverse pyramid. Her ability to process these ideas through the process of reflection speaks to the ways reflection helped her internalize the information presented and became factual information that is part of her personal knowledge. Despite this, during the following interview, Trista questioned how often she should use these techniques, indicating they take additional time to think through and are not yet second nature. This observation speaks to the need for reflection to be done in relationship with a strategically qualified guide (Meek, 2014) as referenced above.

Further demonstrating the importance of reflection, all three study participants changed the structure of the fishbowl in ways that provided scaffolding for the age of students in their classroom or for specific student personalities. The ability to do this is a sign of constructing personal knowledge and is what I think Polanyi (1958) is referring to when he talks about personal judgment as a component of personal knowledge. Theories as lived pedagogical practices function best in practice within a framework of personal judgment, and Korthagen et al. (2006) posit, if you believe teaching is about directly translating theory into practice with no modifications based on the students you have, it is surprising to learn that is not the case. To put it simply, for our context, if a teacher knows the rules well enough, they have permission to break the rules when necessary. When implementing the fishbowl discussion, through the reflection that happened in our post professional development interview sessions, teachers adapted the "rules" presented in order to create the best learning experience for the students in their unique classrooms. As a result, you might say Polanyi (1958) advocates for the stance that great teachers are not only known for their theory or solid pedagogical practice. They are perhaps even better known for abandoning it when they sense that it will not result in the advancement of their students. This idea helps us understand the space between "knowledge as information" and "knowledge as transformation." Meek (2011) says "wisdom requires that knowing be understood to be transformative insight" (p. 132). The end goal of teacher education then could be said to be

wisdom, realizing that wisdom is defined as the knowledge of what is true coupled with the ability to judge rightly.

As teacher educators, which in the context of professional development includes anyone who is providing or facilitating learning experiences for inservice teachers, the assertion that, beyond active learning experiences, there is a need to provide time and space for reflection is critical to keep in mind when developing professional development for inservice teachers. I would advocate it is equally important as the five critical components outlined by Desmoine (2009). When we consider what teachers bring to the table as professionals with personal experience, the opportunity to reflect on learning experiences helps them make sense of information that exists in their mind as alleged and (optimally) cement new techniques and theories as factual. However, as it currently stands, time for both active learning experiences as well as reflection is rarely built into teacher training (Callahan et al., 2016; Desmoine, 2009; Korthagen, 2017).

This role of relationship through an emphasis on knowing as a collective act between two or more people is also supported by other theories of learning as seen in Lave and Wegner's (1991) communities of practice. However, once teachers leave the university setting and enter the classroom, teaching becomes a very solitary profession (Palmer, 2002), and inservice teachers do not always have the opportunity to participate in meaningful, collective learning experiences despite Desmoine's (2009) assertion that collective participation is a critical component of effective professional development. While the role of relationship can present itself in various ways, as seen here through imitation, support, and reflection, this study demonstrates its vital importance in why some teachers are able to learn and implement new theories while others do not.

Agency

When we, as teacher educators, teach good theories or strategies to preservice or inservice teachers, the goal is for teachers to embody these ideas, to successfully implement them, moving over time toward an ability to naturally integrate good theory and technique as part of their classroom practice as the situation requires, and even adapting it to the needs of the students in the classroom if necessary. One of the ways this occurs is through the development of teacher agency. When combined, the three factors outlined above, preparation, commitment, and relationship, appear to lead toward the development of teacher agency. While there are many available definitions for the word agency, for the context of this study and as in the previous chapter, I continue to define agency as "an empowered positioning of teachers as active and adept practitioners in their field, embodying knowledge gained in learning contexts through personal judgment and ability to act."

Interacting with teachers in a professional development setting, teacher educators recognize the degree of uptake of the information provided through the professional development varies significantly by teacher (Brugar & Roberts, 2017), and one final reason this degree of uptake may vary is the agency teachers bring to the professional development experience. This degree of agency was displayed by different participants in different ways throughout the study. For example, when asked if there are times when they would choose not to engage in a discussion, each participant answered in unique ways. Trista suggested she would not engage in discussion if she does not think her students are prepared but would later return to it after preparing them adequately. I would consider this a positive example of a teacher showing agency as it shows a recognition that, if students are not prepared for a discussion, the topics discussed will likely be shallow because "students who have not done the reading come to class and discuss it anyway" (Parker & Hess, 2001, p. 284). Conversely, Sabrina shared that she would not engage in discussion she thinks may go against what parents are teaching in the home, instead

choosing to redirect them to their parents for the discussion. This response seems to come from a place of fear and personal desire to avoid controversial topics due to a perceived threat, which is a common response we see in the literature (Engebretson, 2018; Houser, 1996).

However, the agency teachers bring to any professional development experience is not static. Polanyi's (1958) theory of personal knowledge posits decisions are made out of an individual's way of being in the world at the time the decision is made, and, with the passage of time, decisive abilities continue to grow and change (in Poirier, 2011). Ideally, engaging in effective professional development also assists in the development of decisive abilities.

Throughout this study, I observed two distinct ways teacher agency impacted the way teachers made decisions about implementing the new techniques presented, their ability to integrate and their ability to manage competing demands, in addition to seeing considerable growth over the course of the year.

Ability to Integrate

Polanyi (1958) theorizes personal knowledge is acquired through a process he calls subsidiary focal integration (SFI). Focal awareness and subsidiary awareness are mutually exclusive. You cannot have one without the other, rather you must have both in order to learn new information. When we attempt to learn something new, we must focus on it, while at the same time we are subsidiarily aware of things that we are not focusing on, things we know so well they no longer require our attention. Clandinin (1985), expanding on Polanyi's theory, defines this "subsidiary awareness" as a list of objective content like theories and facts leavened by the personal and practical experiences a teacher brings to the equation. Together, these construct what a teacher "knows" about teaching. SFI is the process used when a person forms new knowledge--when a person's personal practical knowledge is expanded by focusing on new information in an attempt to internalize it.

In part due to the agency and learning experiences Trista brought to the study, while observing Trista implement the discussion based teaching strategies she learned as part of the professional development sessions, I was able to witness SFI in real time while watching the way she incorporated aspects of growth mindset (Brooks et al., 2012) she has focused on over the past couple of years with the new strategies. Growth mindset existed in a subsidiary manner as a tool while her primary focus was on successfully implementing the new strategy, as we saw when she allowed Aaron to participate after the discussion ended even though that was a departure from the demonstrated procedure. SFI was also present in the way Trista managed her classroom. At the end of discussion rounds, she used a bell to indicate the end of conversation. Based on the student response, this appeared to be an existing classroom management tool that Trista integrated with her new area of focus to facilitate student participation.

Throughout the year, Trista continued to use discussion based teaching techniques even when I was not present to observe and, over the course of the year, it seemed some aspects of the strategies became second nature to her and to her students. Students noted desks in pods instead of a "U" shape as abnormal for classroom discussion (indicating the presence of a norm), and they naturally participated in deconstructing these experiences on a regular basis. These aspects of discussion became embedded in the doing of the thing, so natural she told me she did not even realize she was doing them, demonstrating Polanyi's (1958) assertion that knowing in action is tacit and embodied.

On a smaller level and again, in part due to the level of agency Faye brought to the study, I was able to witness her engage in aspects of integration as well. In all three of the lessons I observed, Faye used pre-existing questions from worksheets she has already used in the past.

While throughout the study, I have presented this as negative as the questions were primarily fact based rather than authentic, scaffolded questions, her ability to integrate current classroom

content (again, a tool she readily has available and is deeply familiar with) with a new teaching strategy positively impacted her ability to learn new information and implement it. Hamilton et al., (2016) drawing on ideas of embodied learning from Polanyi, concludes "As teacher educators inquire about their experience, memory, thinking, and practice as teacher educators, they gain clarity about the knowing... embedded in their doing" (p. 209) Through the process of combining the various aspects of this study (the professional development experiences and joint reflections) with the personal knowledge she brought to the experiences, Faye was able to take first steps into embedding this new information into her practice. Hamilton et al. (2016) continue "Their practice shifts, assembles, and reassembles itself. This new knowing and understanding of their practice through doing reconnects, reforms, reshapes their practice becoming tacit and embodied" (p. 209). In these examples of Trista and Faye, it seems their agency has a positive impact on their ability to integrate current classroom practices with new strategies in a way that prompted a tacit and embodied way of knowing.

However, despite Trista's initiative in using each technique multiple times, she did not seek out other discussion strategies to experiment with on her own; she continued to use the ones she learned until the next professional development session, even saying, after the second session, "I have a discussion planned for next week. I was going to use philosophical chairs again, but I can use this instead." She was able and willing to use new information presented to her but did not seek to move past this level. This example demonstrates that even in teachers who have considerable agency, there are still limits and this observation impacts the way we, as teacher educators, think about and plan professional development opportunities for inservice teachers.

Ability to Manage Competing Demands

In attempting to implement new discussion strategies, the ability to manage competing demands also appeared as a way agency impacts a teacher's ability to learn and implement good theory and good technique. Korthagen and colleagues (2006) propose competing demands prevent teachers from being able to fully engage in what they are learning, and this appeared in my observations of Sabrina in two ways, her desire to maintain control of the discussion's destination along with her inability to maintain control of the classroom at large.

Beginning with the End in Mind. Literature shows that many teachers choose not to engage in authentic classroom discussions because they fear losing control of the discourse (City, 2014; Hess, 2004; Klinzing & Rupp, 2008). Given Sabrina's claim that she will not engage in discussions she thinks may go against what parents are teaching in the home and an intimation that she has destination she plans to lead students to especially as it relates to one of her goals for engaging in conversation, "trying to help develop [students] character and help them to develop a Christian worldview," it is not a leap to suppose she is cautious about allowing students to truly engage in authentic discussion because she is fearful of where it might lead. This inability to sacrifice control directly reflects the agency Sabrina exerts as an empowered practitioner embodying knowledge whose personal judgment intersects with action to create a learning environment where all knowledge worth knowing lives with the teacher (Applebee et al., 2003; Hess, 2004) and student voice is stifled. We see this play out in the way Sabrina frequently responds in some way after each student talks which, Barton (1995) suggests, leads to constraining your students' talk.

As mentioned in the previous section, when teachers have focused so intently on educational theories and teaching strategies that they move from a focal position to become subsidiary, teachers are able to pull these tools out effortlessly when the need arises. When that process is successful, when teachers begin to indwell that knowledge, we observe teachers

approaching a problem they feel well equipped to handle, subconsciously using their subsidiary personal knowledge, which now includes educational theories and teaching strategies alongside their personal history, memories of participation in a community of learners, and their professional experience. Unfortunately, in many cases, when prospective teachers begin teaching, they have to actively work against the subsidiary knowledge gained during their own education experiences through the apprenticeship of observation, and this appears to be the case in the way Sabrina values discussion as a tool to reach an end destination. Even though I witnessed a desire in Sabrina to receive positive affirmation, she was unable to move beyond her perspective of her role as a teacher to truly allow authentic discussion to flourish in her classroom.

In retrospect, looking at my initial semi-structured interview with Sabrina, this is hardly surprising. The way her personal experiences play out in facilitating classroom discussion were foreshadowed in some of the comments she made, like "with the interactions I have between my students...there's less... of this free flowing discussion...it's more of a guided discussion and less of just a free flowing, let's just exchange ideas," "I want [students] to be able to know there is black and white in the world," or "at third grade, sometimes they don't think through clearly the implications of their statements." This observation has implications for the way we, as teacher educators, work to develop one-on-one relationships with our students or faculty and take note of their unique views of the world that may necessitate an individualized approach to professional development.

Classroom Management. Serriere and colleagues (2017) advise that while teachers can model the behaviors they hope to see in their students, when engaging in discussions, the dominant pedagogy should shift from teacher-centered to cooperative, and when provided with an appropriate level of support, students can drive classroom discussion and reason in complex

ways. Throughout my observations, when Sabrina tried to implement a new strategy, her desire to maintain control of the classroom environment prevented her from fully being able to implement the strategy as presented because, due to her lack of preparation and teacher education, she lacks routines and procedures that enable a classroom to run smoothly. This is seen when she begins to give directions before students are listening, allows them to walk around the classroom during a discussion, calling on students directly rather than allowing them to talk freely during the discussion, and even when she asks them to write during the discussion indicating that will keep them from being disruptive. Sabrina is depending fully on her own educational experiences as a model for classroom management because she's had no formal training. Although she is excited to engage in a new strategy, this lack of basic tools, as Polanyi (1958) would say, leads to problems not only explicitly attempting to implement new techniques but also moving toward embodiment of the new techniques and making them her own. In this specific example, her desire to retain control prevents her from fully implementing the strategies successfully, but because she is not equipped with strategies for classroom management, she cannot successfully do either. She might have an idea of where she wants to go, but she lacks the tools she needs to get there.

Growth

Within the idea of agency, there is also space for growth. Ideally, we, as teacher educators, have a hope that through effective preservice teacher education and professional development, teachers will develop agency that aligns with good technique and good theory, and these technique and theories indwell and affect the personal judgements a teacher makes--and there is good reason to hope this is true! Because an individual is not the same person that they were week after week, year after year, they are apt to make slightly or significantly different decisions over the passage of time. Just as Hamilton et al. (2016) suggests is true of teacher

educators, "We are always in a process of becoming. As we learn new things, as we try out new practices... we are pushed to become different" (p. 26), the same is true of inservice teachers.

Ultimately, the goal of knowing is transformation, growth, an indwelling of knowledge that positively impacts the person who has gained the knowledge (Meek, 2014). Despite the criticisms I have shared about her practice, throughout the course of the study, Sabrina showed considerable growth, moving beyond needing outside support to solve every problem and beginning to talk through solutions to some of what I witnessed as problems in her classroom, initiating those conversations on her own during the observation reflection and coming up with alternatives without my help. For example, in my observation of her pyramid discussion, there was some confusion surrounding a group reading. I planned to mention this to her, but before I had a chance, Sabrina brought it up along with possible solutions.

As mentioned previously, Polanyi (1958) suggests personal knowledge is acquired through the process of subsidiary focal integration. As a whole, these examples show the role of agency: teachers as active participants in their own learning, bringing personal desire to a learning context impacting their ability to embody knowledge, and specifically relating these concepts to integration, competing demands, and growth. Within these different applications of agency, we see connections to existing literature in the field alongside the way each teacher's unique experiences directly impact the way they learn and implement new theory and techniques. As mentioned previously with an emphasis on relationships, as teacher educators, it is vital that we build relationships with inservice teachers that allow us to gather insight into their professional desires and help us create effective professional development experiences that equip teachers to learn and implement good theory and good technique leading to the development of agency.

CHAPTER 6

CONCLUSION

This study examined the question "Why are some teachers able to learn (as evidenced by implementation or integration into their practice) good technique and good theory while others cannot?" Using a qualitative study design alongside intimate scholarship and grounded theory analysis, I worked with four elementary school teachers to look for commonalities between the ways they learned and implemented new techniques and theories. Over the course of a year during which a series of effective professional development sessions took place, teachers were introduced to three new discussion based teaching strategies and were required to implement each of them at least one time for observation. Analyzing interview data, observations, and analytic memos, I found four overarching factors that directly impacted the way teachers engaged in not only the initial professional development experience but also how they implemented new learning after the session ended, including preparation, commitment, relationship, and agency. Together, these four factors make up a tentative theory, Embodied Knowing in Teacher Education, that holistically answers the research question and sheds light on how the personal experiences teachers bring, both positively and negatively, to the learning experience directly impact their ability to learn and internalize new information in ways that impacts their classroom practice. As a result, this study provides implications for teacher educators involved in professional development for inservice teachers and suggests several areas for future research in the field.

Implications

In considering the results of this study and the emerging theory of Embodied Knowing in Teacher Education, I found several distinct factors that impact teachers' ability to learn good

technique and good theory as evidenced by implementation or integration into their practice. First, the ability to learn was impacted by the preparation they brought to the learning experience, the preparation provided by the professional development sessions, and their ability to prepare themselves and their students for engaging in the new strategy. Second, teachers were impacted by their own personal biases about the role of discussion. This bias influenced the level of commitment they brought to the study, in alternating cases excited by a desire to improve, hesitant to fully commit, or placing a high degree of importance on the usefulness of the sessions. Throughout the year, I also found that relationship by means of imitation, support, and reflection played a vital role in an individual teacher's ability to successfully implement techniques as did the agency they brought into the study with them. When considered together, these factors indicate professional development that leads to embodied knowing aligns with teacher preparation and commitment levels, and it is conducted in relationship with a trusted guide. With these factors addressed, theory and techniques introduced during professional development are more likely to be successfully implemented and lead to the development of agency as defined above. In contrast, a failure to align professional development with a teacher's individual preparation or commitment level or a failure to provide opportunities for learning to be done in relationship with others makes these experiences less likely to lead to embodied knowing.

The school highlighted within this study provided a particular context because of the existing relationship I have within the school and the unique backgrounds of the teachers who chose to participate. While this study thoroughly focused on only three teachers and its findings cannot be generalized, the participants' responses suggest implications for teacher educators, school leaders and administrators, and instructional coaches as well as independent consultants or curriculum publishers developing professional development programs. These include

considering whose responsibility it is to prepare teachers, viewing teachers as unique individuals, promoting reflection as a link between theory and practice, and the importance of building relationships.

Whose Responsibility is Preparation?

Of the three faculty member participants who fully participated in the study, none came from a formal education background and all three entered the field with limited but wildly varying levels of experience. The number of emergency certified teachers has steadily increased over the past several years as teachers leave the field in staggering numbers (Egar, 2019; OSDE, 2019). While there are state mandated requirements in place for teachers who choose to enter public school classrooms with alternative certifications, these requirements and certifications are not mandated for teachers working in a private school setting. This observation brings up an interesting question: With whom does the responsibility to prepare teachers lie, teachers who choose to enter a career for which they have not been formally educated, or administrators who hire teachers without preparation? Ideally, teachers who choose to enter the classroom would desire and even seek access to professional development, but as demonstrated in this study, teachers have varying levels of commitment and often, even beginning teachers with formal education struggle to survive (Feiman-Nemser, 2012). On the other hand, professional development provided by administrators is often perceived by teachers to be a waste of time (Gonzalez, 2016), and, as we see in this study along with others (Callhan et al., 2016), if teachers are not bought in, it is unlikely they will retain or use material that is presented.

As an alternative to the either/or binary (either teachers or administrators), I would suggest a preposition: with. Both teachers and administrators have a responsibility to engage in or provide professional development, but for this to be done well, it should be done in relationship with one another. Though not all school districts have the bandwidth or staffing to be

able to offer one-on-one consulting to provide the best possible plan for continuing education, it is important for school administrators to consider this question when thinking about providing professional development. When teachers seek help from available professionals within the field to create a plan and administrators take the individual person into consideration when offering opportunities for further development (ideally in conversation *with* the other, providing resources that align with a teacher's areas of interest), it is reasonable to expect the degree of uptake will be significantly higher and more likely to lead to embodied knowing.

Teachers as Individuals

Beyond a conversation about who is responsible for preparation, it is also important for teacher educators of any type to think of teachers as individuals who have unique perspectives which deeply impact their style of teaching. Desmoine (2009) offers a framework that outlines five critical components of effective professional development, but this framework does not take into account the personal experience and knowledge teachers bring to the table. Although this study focused on only three teachers and its findings cannot be generalized, throughout the data analysis process, I intentionally focused on providing a holistic narrative of each participant before entering the discussion to highlight the fact that each teacher enters into a new learning venture with experiences and personal bias that impact the way they interact with new theory and new strategies and the way they choose to implement it.

I especially noted the impact of personal experience or bias in the way Sabrina uses the discussion based teaching strategies presented as tools to convince students of her perspective rather than as tools to help students engage in authentic discussion. However, in retrospect, when I look at the in depth conversations Sabrina and I had about discussion before beginning the study, there are signs that she would engage in this way. This implies that it is important for those providing the professional development to know their audience in a personal way, taking

time to gauge a participant's interest, background with the topic, and commitment level, providing the ability to address bias head on and/or convince the audience of the topic's usefulness rather than make assumptions about the personal beliefs and commitment level of those participating in the sessions.

Promotion of Reflection as the Link Between Theory and Practice

Throughout the body of work produced by Korthagen (Korthagen, 2017; Korthagen & Kessels, 1999; Korthagen et al., 2006; Zwart et al., 2014), reflection is positioned as a key component in the teacher education process for both preservice and inservice teachers. In this study, we see reflection as the location where teachers take the theory or technique that has been presented and think through its relevance to their own practice. This observation highlights the need for reflection as part of professional development, both collectively and one-on-one.

Collective Reflection: Deconstruction of Model Lesson

Whether teachers are learning new theory or new techniques, the opportunity to experience the technique being presented is a rare occurrence (when compared to the occurrence of listening to a lecture on the same topic) (Callahan et al., 2016) despite Korthagen's (2006) assertion that the learning of teachers is only meaningful and powerful when it is embedded in the experience of learning to teach. As Faye said during our interview, "We don't often have examples. So like maybe we were given... some theoretical model, but [it's] not necessarily put into practice." Given that observation, one implication of this study is a need for professional development in which learning about teaching is embedded in experiences of learning and teaching, i.e., active participation in teaching experiences.

Beyond that, in group learning experiences, there is a need for time to deconstruct the model lesson. Simply participating in or observing a model lesson does not constitute active learning (Desmoine & Pak, 2017). However, deconstructing the experience collectively or

participating in a group reflection allows teachers to make connections with their own classroom practices and/or students and allows them to further internalize this information, and it also positions the teacher as an adept practitioner who has knowledge worth sharing to contribute to the learning venture, disrupting the traditional power structure frequently present in professional development experiences.

One-on-One Reflection: Planning and Reflecting on Observation Lesson

While participation in this study was optional, those who fully participated were required to implement the strategies introduced at least once and meet with me to discuss both the professional development experience and the implementation of the strategy. In these conversations, teachers were given the opportunity to discuss what they thought would work, what concerns they had, and then receive feedback on the lesson as it was enacted. Recent research suggests professional development is more likely to be successful if teachers have opportunities to practice and receive feedback (Desmoine & Pak, 2017). This study appears to affirm this suggestion and implies that, when thinking about how teachers learn in a way that impacts their classroom practice and leads to the development of agency and embodied knowing, reflection is a key piece of the equation.

Regardless of whether the reflection is done one-on-one or collectively, it is indispensable that those planning professional development experiences build in time to engage in the reflection process over and over to provide opportunities for the construction of new knowledge with others. However, before administrators or curriculum companies begin to add in time vaguely assigned to "reflection" into their programming, it is important to consider what constitutes reflection. Dewey (1910) defines reflection as "active, persistent, and careful consideration." While this provides a starting place, before assigning reflection carte blanche,

teacher educators, administrators, and instructional coaches should all carefully think through the purpose of the reflection and engage accordingly.

The Importance of Building Relationships

Perhaps the most surprising finding in this study was the role of relationship in the construction of knowledge. While not explicitly named, it is present in the first three implications as I have already suggested: it is important to individualize professional development opportunities for teachers through one-on-one relationships, it is important to be aware of the personal knowledge teachers bring with them to professional development sessions, and it is important to provide opportunities for reflection of new learning to be done with others. All of these tasks assume a relationship between the person providing or facilitating the professional development and the teacher participating. This supports Meek's (2014) assertion that knowing can only be done together with others, and further, should take place within a relationship of trust. However, this principle feels slightly out of place within the field of education given that deeply intimate, trusting relationships are rarely emphasized within a professional workplace, and their connection to embodied knowing and teacher agency is not explicitly made. Further, the existence of this type of relationship within a large school district seems, at best, unlikely, and current methods of professional development do little to facilitate or foster them.

Power and Prepositions: To, For, or With?

Above, I briefly referenced the idea of power structures present within professional development experiences. While student-centered classrooms have become more popular as teachers learn best practices for engaging students (Jones, 2007), teacher education experiences have largely remained static, continuing to rely on lecture (Callahan et al., 2016) and doing little to position the teacher as an adept practitioner with knowledge to contribute. But if students learn by (as is assumed throughout this study) participating in authentic discussion with others

(Demoiny, 2017; Hill, 2009; Parker, 2006a) and by creating a classroom environment where all the knowledge worth knowing does not live within the teacher (Applebee et al., 2003; Hess, 2004), it follows that this environment would also be a more effective learning environment for teachers. Palmer (1997) calls this type of learning environment a community of truth, a place where experts and amateurs alike engage in discovering truth together. A community of truth adopts a circular, interactive, and dynamic structure and eschews the linear power structure traditionally favored by professional development. As relationship emerged as a major factor in the development of teacher agency and embodied knowing, those who plan and facilitate professional development should consider reimagining professional development opportunities within a structure similar to Palmer's (1997) community of truth.

One way professional development can begin to be reconceptualized is through the use of prepositions used to describe professional development: Professional development is given to teachers or professional development is arranged for teachers. These prepositions indicate the power-structure dependent relationship that presently exists between the individual providing the professional development and the teacher(s) participating in the professional development. As above, in thinking about learning in (positive and healthy) relationship with other(s), I would like to propose an alternative. Rather than describing professional development to or for teachers, what if it was reimagined as professional development with teachers?

Absence of Relationship

With the role of relationship at the forefront of the implications of this study, it seems prudent to mention Bonnie. However, before beginning this section, I want to acknowledge that the line between a personal relationship and a professional relationship can be murky and, in many cases, a personal relationship within the workplace can be seen as unprofessional. However, I think it would be disingenuous to describe the relationship required to construct

knowledge as a purely surface level professional relationship. In the case of Bonnie, I feel that we have a professional relationship, but we do not have a personal professional relationship. As such, it is worth noting that the one participant who did not attempt the strategies is the one participant with whom I do not feel like I have a personal relationship.

While the other three participants' attempts to implement were not perfect, all three trusted my advice when I suggested the discussion based practices modeled during professional development sessions were sound teaching practices, and they felt comfortable enough to seek me out for additional help and guidance to the point where they felt they could attempt to implement them if necessary. Bonnie walked away from the study without even attempting to implement and spoke of our lack of relationship critically in our final interview. This vignette implies the absence of a relationship has the ability to prevent teachers from moving toward agency and embodied knowing and has significant implications for those planning professional development opportunities. For school administrators, knowing what teachers bring to the table as outlined above is important, but providing support and a community of trust appears to be integral to the construction of knowledge that impacts teaching practice. This observation mirrors what Mitra and Serriere (2012) saw at Dewey Elementary School.

Further, earlier in this study, I referenced myself as a de facto instructional coach. While this is not my official title, with a present push for school districts to officially hire instructional coaches (Desimone & Pak, 2017), it is important for teacher educators as well as school administrators to consider the role these coaches play including their ability to build relationships with teachers. Beyond an interactive mentee/mentor relationship, do instructional coaches provide support that aligns with good theory and increases the ability of classroom teachers to understand and implement it? Are they meant to provide and/or extend professional development

experiences presented for inservice teachers? And finally, what implications does this as well as the other findings discussed in this section have for future research in teacher education?

Suggestions for Future Research

Understanding how teachers learn and how that relates to what we, as teacher educators, need to consider when developing learning experiences that impact classroom practice requires further investigation that provides insight into how teachers construct meaningful knowledge as well as how professional development can be designed to take into consideration what teachers bring, both positively and negatively, to the learning experience. More specifically, this study indicates multiple areas for future study, including:

- development of larger scale studies that support or refute the proposed theory of
 Embodied Knowing in Teacher Education for both inservice and preservice teachers,
- exploring the uptake of teachers involved in professional development experiences that
 rely on either one-on-one relationships or collective relationships,
- examining professional development experiences that emphasize power-neutral structures and the language of "with" rather than "to" or "for," and
- investigating the role of instructional coaches and how they are or are not effective in helping teachers learn and implement new theories and strategies.

In addition to these recommendations for research, since this study focused specifically on an intimate group of only four teachers with primarily non-traditional backgrounds in a unique private school setting, additional studies that examine teachers from other school settings would be valuable.

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APPENDICES

Appendix A

Initial Semi Structured Interview Protocol

Date:	Teacher:	

Introduction

You have been invited to participate in research about the ways discussion plays a role in education.

If you agree to participate today, I will be asking you to share details about your personal and professional experiences with discussion, and I will be asking for your permission to record this conversation. I will be using a 3rd party service to transcribe interviews.

This should take less than one hour. There are no risks or benefits to participating in this interview. After removing all identifiers, I might share your data with other researchers or use it in future research without obtaining additional consent from you.

Your participation is voluntary. Even if you choose to participate now, you may stop participating at any time and for any reason. I can be reached at amy.e.allen-1@ou.edu and my advisor, Dr. Kristy Brugar, can be reached at kristy.a.brugar@ou.edu.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board at 405-325-8110 or irb@ou.edu with questions, concerns or complaints about your rights as a research participant, or if you don't want to talk to me.

As you know, I am interested in investigating the ways discussion plays a role in education. Particularly, I am trying to explore the ways teacher experiences with discussion influence their teaching methods. If the questions are general and abstract, you may volunteer any detail you wish. You also have the option of declining to answer – passing on – any of the questions. Do you have any questions before we start?

Semi Structured Interview Guide

A. General Feelings about "Discussion"

- When I mention discussion, what are your first thoughts?
- How would you define discussion?

- In your opinion, is discussion the same or different than dialogue?
- How do you see discussion as part of your life, in or outside of the classroom?

B. K-12 Discussion Experiences in Elementary School

- Can you think of a particularly meaningful time when you participated in discussion during your K-12 experience? Tell me about it.
 - Subject/Teacher?
 - Small Group/Large Group
 - Teacher driven/Student driven?
 - Structured/unstructured?
- Generally, when you participated in discussion activities in school, what did they look like?

C. Discussion Experiences in College or your Teacher Education Program

- Did you participate in discussions more or less in college and/or your teacher education program than in your K-12 experience? Why do you say that?
- Can you think of a particularly meaningful time when you participated in discussion in college and/or your teacher education program? Tell me about it.
 - During which classes?
 - Small Group/Large Group?
 - Teacher driven/Student driven?
 - Structured/unstructured?
- Generally, when you participated in discussion activities in college and/or your teacher education program, what did they look like?

D. Discussion Experiences Outside of Formal Education

- Aside from formal education, where in your life do you encounter discussion?
- When you engage in discussion, what is goal of the encounters? Is it always the same, or do you engage for different reasons?
- Are there times you consciously choose not to engage in a discussion? Why or why not? Can you give me an example of a specific time you consciously chose to not to engage in a discussion? Walk me through your thought process in that situation?

- Do you feel like engaging in discussion is a big part of your life? Why or why not?
- How do you think discussion in your personal life is the same or different from the discussions you encountered in your education? Why do you feel that way? Can you give me specific examples that illustrate the similarities/differences?
- Do you feel like your education prepared you for the discussions you are expected to engage in as a citizen?

E. Discussion Experiences in your Classroom

- As a teacher, in what ways do you try to incorporate discussion into your classroom?
- Why (or why not) do you choose to use discussion based teaching methods in the classroom? When you choose to use these strategies, what is your goal for using them?
- Were you taught to use discussion based strategies? If so, describe to me how you learned to teach using discussion based strategies.
- Generally, when you engage in discussion in your classroom, what does it look like? If you were comparing discussion in your classroom to other types of discussion you engage in, would it look most like what you engaged in during your own elementary education, middle or high school, college, or outside of your formal education?
- Can you think of a particularly meaningful time when your class participated in discussion? Tell me about it. Why was it meaningful to you?
- If you have taught multiple grades, can you explain to me ways in which you change your teaching practices surrounding discussion depending on the grade level?

Closing

Now that we are done, do you have any questions you'd like to ask me about this research project? If you want to contact me later, here is my contact information. Also, I may need to contact you later for additional questions or clarification. Can I also have your follow-up contact information?

Thank you for your time and willingness to participate.

Appendix B

Follow Up Semi Structured Interview Protocol

Date:	Teacher:	

Introduction

You have been invited to participate in research about the ways discussion plays a role in education.

If you agree to participate today, I will be asking you to share details about your personal and professional experiences with discussion, and I will be asking for your permission to record this conversation.

This should take less than 15 minutes. There are no risks or benefits to participating in this interview. After removing all identifiers, I might share your data with other researchers or use it in future research without obtaining additional consent from you.

Your participation is voluntary. Even if you choose to participate now, you may stop participating at any time and for any reason. I can be reached at amy.e.allen-1@ou.edu and my advisor, Dr. Kristy Brugar, can be reached at kristy.a.brugar@ou.edu.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board at 405-325-8110 or irb@ou.edu with questions, concerns or complaints about your rights as a research participant, or if you don't want to talk to me.

As you know, I am investigating the ways discussion plays a role in education. Particularly, I am trying to explore the ways teacher experiences with discussion influence their teaching methods. If the questions are general and abstract, you may volunteer any detail you wish. You also have the option of declining to answer – passing on – any of the questions. Do you have any questions before we start?

Semi Structured Interview Guide

- What is your initial response to the professional development training we just completed?
- As a result of this training, do you feel more or less prepared to engage in discussion with your students? Why?

- As a result of this training, are you more or less likely to engage in discussion based strategies with your students? Why?
- Have you heard about or used any of the instructional strategies described in the workshop before? Please describe those experiences (if applicable).
- How is the training you engaged in today similar or different from the type of professional development you have done in the past?
- How is the discussion you engaged in today similar or different from the type of discussions you have participated in during your formal education?
- You are expected to utilize one of the strategies presented today during an observation in the coming weeks. What do you feel in response to that statement?
- What additional questions do you have about facilitating discussion in your classroom?

Closing

Now that we are done, do you have any questions you'd like to ask me about this research project? If you want to contact me later, here is my contact information. Also, I may need to contact you later for additional questions or clarification. Can I also have your follow-up contact information?

Thank you again for your time and willingness to participate in this study.

Appendix C

Observation Reflection Protocol

Date of observation:	Teacher:
<u>Introduction</u>	
•	ingness to participate in this study. As you know, I am a role in education. Particularly, I am trying to explore assion influence their teaching methods.
• What is your initial response to the	e lesson you just finished teaching?
• What was your goal for this lesson	?
Which discussion strategies did yo	ou use in this lesson?
• Why did you choose to pair this str	rategy with this specific content?
• In what ways did it go as you expe	ected?
• In what ways did it surprise you?	
• Do you think you will choose to us why not?	se this discussion strategy again in the future? Why or

Closing

Thank you again for your time and willingness to participate in this study.

Appendix D

Final Semi Structured Interview Protocol

Date:	Teacher:

Introduction

You have been invited to participate in research about the ways discussion plays a role in education.

If you agree to participate today, I will be asking you to share details about your personal and professional experiences with discussion, and I will be asking for your permission to record this conversation. I will be using a 3rd party service to transcribe interviews.

This should take less than one hour. There are no risks or benefits to participating in this interview. After removing all identifiers, I might share your data with other researchers or use it in future research without obtaining additional consent from you.

Your participation is voluntary. Even if you choose to participate now, you may stop participating at any time and for any reason. I can be reached at amy.e.allen-1@ou.edu and my advisor, Dr. Kristy Brugar, can be reached at kristy.a.brugar@ou.edu.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board at 405-325-8110 or irb@ou.edu with questions, concerns or complaints about your rights as a research participant, or if you don't want to talk to me.

As you know, I am interested in investigating the ways discussion plays a role in education. Particularly, I am trying to explore the ways teacher experiences with discussion influence their teaching methods. If the questions are general and abstract, you may volunteer any detail you wish. You also have the option of declining to answer – passing on – any of the questions. Do you have any questions before we start?

Semi Structured Interview Guide

A. General Feelings about "Discussion"

- When I mention discussion, what are your first thoughts?
- How would you define discussion?

- In your opinion, is discussion the same or different than dialogue?
- How do you see discussion as part of your life, in or outside of the classroom?

B. Discussion Experiences Outside of Formal Education

- When you engage in discussion, what is the goal of the encounters? Is it always the same, or do you engage for different reasons?
- Do you feel like engaging in discussion is a big part of your life? Why or why not?

C. Discussion Experiences in your Classroom

- As a teacher, in what ways do you try to incorporate discussion into your classroom?
- Why (or why not) do you choose to use discussion based teaching methods in the classroom? When you choose to use these strategies, what is your goal for using them?
- During our professional development sessions, you were taught to use discussion based teaching strategies in the classroom. Describe to me how you learned to teach using discussion based strategies.
- When you think about a successful discussion, what does that look like?

Closing

Now that we are done, do you have any questions you'd like to ask me about this research project? If you want to contact me later, here is my contact information. Also, I may need to contact you later for additional questions or clarification. Can I also have your follow-up contact information?

Thank you for your time and willingness to participate.

Appendix E

Inservice Sessions Outline

Training 1: October 23, 2020

- Asking authentic questions
- Creating a "safe space"
- Strategy 1: Philosophical Chairs (using picture books)/Value Lines
- Reading:

Serriere, S., Burroughs, M., & Mitra, D. (2017). Kindergartners and "philosophical dialogue": Supporting child agency in the classroom. *Social Studies and the Young Learner*, 29(4), 8-12.

Training 2: February 5, 2021

- Scaffolding/demonstrating thinking skills
- Considering multiple perspectives
- Strategy 2: Pyramid Discussion
- Reading:

Payne, K. A., & Green, E. (2018). Inquiry through the lens of identity: An exploration and inquiry in the fifth grade. *Social Studies and the Young Learner*, 30(3), 4-8.

Training 3: April 30, 2021

- Encouraging participation from all students
- Strategy 3: Fishbowl
- Reading:

Hess, D. (2004). Discussion in social studies: Is it worth the trouble? *Social Education*, 68(2), 151-155.

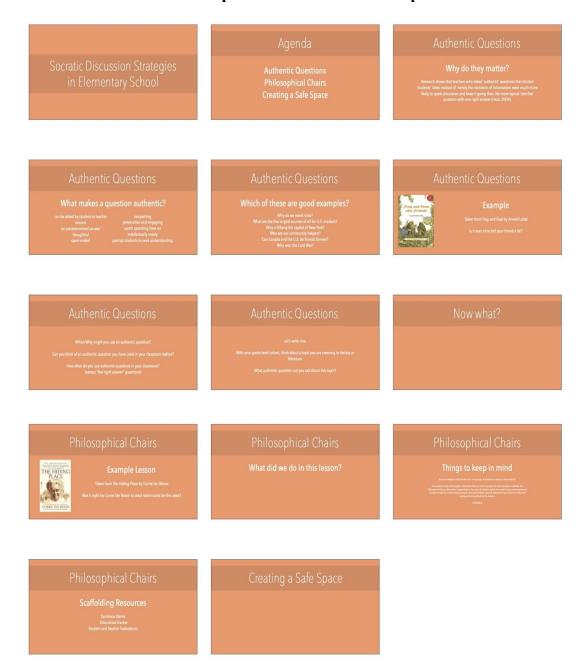
Appendix F

Observation Protocol

Date:	Time:	Length of lesson:
Teacher:	Grade:	Number of students present:
Questions to Consider		Notes
What discussion strategies is the to	eacher using?	
Record any authentic questions yo teachers. How does the teacher res		
Who is being called on? How are sthey want to speak?	students being recognized if	
How many students are given the to speak during class discussions? enthusiastic?	* *	
In what ways is the teacher provid	ing wait time?	
In what ways, if any, is the teacher	moving during the lesson?	
In what ways does the teacher dev lesson?	iate from the planned	
Hess (2004) notes seven character discussion. Which of these seven of this lesson? (Circle those present).	characteristics are present in	interpretable topic/authentic question, in-depth exploration of a topic, teacher is prepared/students are prepared, meaningful argument, most of the talk comes from the students, many people talk, participants are engaged
Note any overarching observations specific incidents/activities that are	•	

Appendix G

Professional Development Session One: Philosophical Chairs



Appendix H

Professional Development Session Two: Pyramid Discussions





























Appendix I

Professional Development Session Three: The Fishbowl Discussion



Appendix J

Data Accounting Log

Data Accounting Log									
	Trista	*	Sabrina	*	Faye	*	Bonnie	*	Amy *
Initial Interview	10/13/2020	*	10/7/2020	*	10/23/2020	*	10/21/2020	*	
Professional Development 1 Slides	-		-		-		-		10/23/20 20
Professional Development 1 Observations	-		-		-		-		4/5/2021
Professional Development 1 Reactions (Analytic Memo)	-		-		-		-		10/23/20 20
Follow-Up Interview 1 (did not happen)									
Lost participant (Analytic Memo)									1/20/21
Classroom Observation 1	11/06/20		12/4/2020		12/11/2020		Dropped out		
Student Documents re: Observation 1	n/a		yes		yes				
Observation Interview 1	11/13/2020	*	1/11/2021	*	1/11/2021	*			
Professional Development 2 Slides	-		-		-		-		2/5/2021
Professional Development 2 Observations	-		-		-		-		4/19/202
Professional Development 2 Reactions (Analytic Memo)									2/5/2021
Follow-Up Interview 2	2/11/2021	*	2/11/2021	*	02/08/2021	*			
Follow-Up Interview 2 Reactions (Analytic Memo)	2/11/2021		2/11/2021		02/08/2021				
Classroom Observation 2	2/25/2021		2/26/21		2/23/2021				

Student Documents re:									
Observation 2	yes		n/a		n/a				
Classroom Observation 2 Reactions (Analytic Memo)	2/23/2021; 2/25/2021		2/26/2021		2/23/2021				
Observation Interview 2	3/1/2021	*	3/1/2021	*	3/9/2021	*			
Observation Interview 2 Reactions (Analytic Memo)	3/1/2021		3/1/2021		n/a				
Bonus Classroom Observation	3/12/2021								
Professional Development 3 Slides	-		-		-		-		4/30/202
Professional Development 3 Entrance/Exit Tickets									4/30/202
Professional Development 3 Reactions (Analytic Memo)	-		-		-		-		4/30/202
Follow Up Interview 3	5/6/21	*	5/5/21	*	5/5/21	*			
Follow Up Interview 3 Reactions (Analytic Memo)	n/a		5/6/21		n/a				
Classroom Observation 3	5/14/21		5/7/21		5/7/21				
Student Documents re: Observation 3	n/a		yes		yes				
Classroom Observation 3 Reactions (Analytic Memo)	n/a		5/7/21		5/7/21				
Observation Interview 3	5/21/21	*	5/8/21	*	5/11/21	*			
Post Interview	5/21/21	*	5/8/21	*	5/20/21	*	5/19/21	*	
* = transcribed									