6-2021

Investigating the Connection between Teacher Professional Development and the Lesson Planning Process

Kyle B. Corlett

Western Michigan University, kylebcorlett@gmail.com

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Teacher Education and Professional Development Commons

Recommended Citation


This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.
INVESTIGATING THE CONNECTION BETWEEN TEACHER PROFESSIONAL DEVELOPMENT AND THE LESSON PLANNING PROCESS

by

Kyle B. Corlett

A dissertation submitted to the faculty of the Graduate College in partial fulfillment of the requirements for the degree of Doctor of Philosophy Educational Leadership, Research and Technology Western Michigan University June 2021

Doctoral Committee:

Patricia Reeves, Ed.D., Chair
D. Eric Archer, Ph.D.
Jennifer Sell, Ed.D.
INVESTIGATING THE CONNECTION BETWEEN TEACHER PROFESSIONAL DEVELOPMENT AND THE LESSON PLANNING PROCESS

Kyle B. Corlett, Ph.D.

Western Michigan University, 2021

School districts across the country are facing increasing pressure to raise student achievement, specifically on state standardized tests (Buzick & Jones, 2015; Marsh & Farrell, 2015). Many states, including Michigan, connect teacher and administrator evaluations to student achievement (Revised School Code Act 451, 2003). The primary strategy school districts use to improve student achievement is professional development for its staff (Guskey, 2009). Professional development can consist of a variety of strategies to support educators in increasing their knowledge and skills, resulting in improved instruction and ultimately improved student achievement. This instrumental case study sought to explore how teachers experience the lesson planning process after participating in the professional development activity of instructional coaching. Their experience includes their cognitive process while planning lessons and how they apply what they learned from the instructional coaching sessions.

The challenge necessitating this study is great. As stated, professional development is the primary strategy districts use to implement change; yet there is little “valid and scientifically defensible” research to support the characteristics of professional development that improve student achievement (Guskey, 2009). The findings of the current qualitative study suggest that the professional development activity of instructional coaching plays a central role in the
The study was conducted at a single school in a Midwestern state using interviews and observations of instructional coaching sessions of three teachers and one instructional coach, along with interviews of teachers after coaching sessions. Of the 13 emergent themes of the study, 11 aligned to previous research findings and two themes were new. The major findings of this study are as follows: (1) teachers change the cognitive processes used for lesson planning in consideration of the instructional strategies and resources shared by the instructional coach; (2) instructional coaches use instructional unit planning as a way to incorporate strategies that improve student improvement; (3) teachers select new practices to incorporate into their lesson plans that they anticipate will lead to increased student ability to complete assignments independently; (4) teachers demonstrate increased structure in their daily lesson plans and long-term plans of instruction after participating in instructional coaching; (5) teachers express more confidence in the lesson planning process after participating in instructional coaching; and (6) teachers demonstrate repeated use of instructional strategies provided by or created with the instructional coach over an extended amount of time.
ACKNOWLEDGMENTS

Sincere thanks to my chairperson, Dr. Patricia Reeves, for helping me throughout the doctoral program since day one. Thank you also to Dr. Eric Archer for going above and beyond in assisting me developing this dissertation and Dr. Jennifer Sell in helping with the recruitment process and answering random questions.

I am extremely grateful to the participants of my study who made time for interviews, observations, answering emails, and member checking during a very difficult time being an educator due to COVID-19. Their consideration, kindness, and openness made the data collection painless and enjoyable.

I am thankful for my supporting and loving family. My wife, Jill, and children, Wynn and Vivian, were patient with me during all of the nights and weekends I spent working on doctoral classes and in completing this dissertation.

Finally, I am thankful to God for providing opportunities and transforming my life in ways that are far more than I could have ever imagined.

Kyle B. Corlett
# TABLE OF CONTENTS

ACKNOWLEDGMENTS ................................................................................................................. ii

LIST OF TABLES ......................................................................................................................... x

LIST OF FIGURES ....................................................................................................................... xi

CHAPTER

I. INTRODUCTION TO THE STUDY ......................................................................................... 1

    Problem Statement .................................................................................................................. 4

    Significance ............................................................................................................................ 7

    Purpose Statement and Research Questions ....................................................................... 10

    Conceptual Framework ......................................................................................................... 10

    Reflections on My Identity .................................................................................................... 15

    Methodology .......................................................................................................................... 17

    Chapter I Conclusion and Summary ...................................................................................... 17

II. LITERATURE REVIEW ......................................................................................................... 18

    Importance of Professional Development ............................................................................ 19

    Previous Studies on Professional Development .................................................................... 20

        Professional Development Definition ............................................................................. 20

        Previous Research on Effective Professional Development ........................................... 21

        Instructional Coaching ........................................................................................................ 23

        Effective Professional Development Meets District and Teacher Needs ....................... 25

        Professional Development Barriers for Educational Leaders ........................................ 26
# Table of Contents—Continued

## CHAPTER

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges of Studying Professional Development</td>
<td>28</td>
</tr>
<tr>
<td>Obstacles for Leaders in Planning Professional Development</td>
<td>30</td>
</tr>
<tr>
<td>Lesson Planning</td>
<td>31</td>
</tr>
<tr>
<td>Curriculum/Instructional Design</td>
<td>33</td>
</tr>
<tr>
<td>Why Teachers Plan Lessons Differently</td>
<td>36</td>
</tr>
<tr>
<td>Considerations for Planning Lessons</td>
<td>36</td>
</tr>
<tr>
<td>Lesson Planning Decision-Making</td>
<td>37</td>
</tr>
<tr>
<td>Current Trends in Lesson Planning</td>
<td>38</td>
</tr>
<tr>
<td>Cognitive Load Theory</td>
<td>40</td>
</tr>
<tr>
<td>Teacher Preparatory Training in Planning Lessons</td>
<td>41</td>
</tr>
<tr>
<td>The Benefits of Studying Design</td>
<td>44</td>
</tr>
<tr>
<td>Decision-Making Theories</td>
<td>44</td>
</tr>
<tr>
<td>Attribution and Sensemaking Theories</td>
<td>45</td>
</tr>
<tr>
<td>Sociocultural Learning Theory</td>
<td>47</td>
</tr>
<tr>
<td>Adult Learning Theory</td>
<td>48</td>
</tr>
<tr>
<td>Transformative Learning Theory</td>
<td>49</td>
</tr>
<tr>
<td>Chapter II Conclusion and Summary</td>
<td>50</td>
</tr>
</tbody>
</table>

## III. METHODS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Design, Approach, and Rationale</td>
<td>51</td>
</tr>
<tr>
<td>Population, Sample, and Setting</td>
<td>53</td>
</tr>
</tbody>
</table>
Table of Contents—Continued

CHAPTER

Permissions .......................................................................................................................... 58

Data Collection Methods, Procedures, and Instrumentation............................................ 58

Forms of Data ...................................................................................................................... 58

Data Collection Protocols and Procedures ..................................................................... 61

Confidentiality of Data ....................................................................................................... 62

Data Analysis ...................................................................................................................... 63

Organization ....................................................................................................................... 63

Method ................................................................................................................................. 63

Trustworthiness ................................................................................................................... 64

Delimitations ....................................................................................................................... 68

Chapter III Summary ......................................................................................................... 68

IV. FINDINGS ..................................................................................................................... 70

Setting ................................................................................................................................. 71

Participant Profiles ............................................................................................................ 73

Darla .................................................................................................................................... 73

Erica ..................................................................................................................................... 76

Katrina ................................................................................................................................. 77

Veronica ............................................................................................................................... 78

The Data Collection Process ............................................................................................. 79

Data Analysis ....................................................................................................................... 81
Table of Contents—Continued

CHAPTER

First Cycle Coding .......................................................................................................................... 81

Second Cycle Coding .................................................................................................................... 82

Credibility ...................................................................................................................................... 83

Initial Themes ................................................................................................................................. 84

Theme 1: Teachers Participating in Instructional Coaching View Themselves as Having a Growth Mindset, or “Coachable,” While They View Their Colleagues as Having a Fixed Mindset or in Their Words “Old School” ......................................................................................................................... 86

Theme 2: Teachers Participating in Instructional Coaching Value the Structure That Results From the Coaching but Enjoy not Having Structure as an Administrative Mandate ........................................................................ 88

Theme 3: Teachers Participating in Instructional Coaching Volunteer to Participate in Receiving it to Meet a Specific Personal Need Such as Writing Instruction ......................................................................................................... 89

Findings ........................................................................................................................................... 90

Finding 1: Teacher Cognitive Processes Focused on the Selection of Activities to Utilize in Introducing or Practicing the Development of Skills ........................................................................................................ 91

Finding 2: Teachers Consider Background Knowledge of Students and What is the Next Logical Step in Progression for Students in a Particular Skill ........................................................................................................... 92

Finding 3: Consideration of Instructional Activities to Utilize in the Classroom Concentrated on Activities That Would Benefit Specific Students, be Engaging, or that are Developmentally Appropriate ......... 93

Finding 4: Teachers Make Repeated use of Instructional Strategies Over an Extended Amount of Time That Were Provided by or Created With the Instructional Coach ..................................................................................... 95
Table of Contents—Continued

CHAPTER

Finding 5: Teachers Immediately Consider and Apply Strategies They Learned During Instructional Coaching and how They can Apply Them...... 96


Finding 7: Teachers Demonstrated Increased Structure to Their Daily Lesson Plans and Long-Term Plans of Instruction After Participating in Instructional Coaching............................................. 102

Finding 8: The Teachers’ Cognitive Process of Lesson Planning Changed to Consider the Instructional Strategies and Resources Shared by the Instructional Coach............................................ 104

Finding 9: Instructional Coaches use Instructional Unit Planning as a Way to Incorporate Strategies That Improve Student Improvement......... 105

Finding 10: Teachers use the Process of Self-reflection During Instructional Coaching to Identify Content That Necessitates Reteaching to Improve Student Achievement ........................................ 106

Finding 11: Teachers Incorporate New Instructional Strategies Into Their Lesson Plans That They Expect will Increase Active Student Engagement ................................................................. 107

Finding 12: Teachers Select New Instructional Practices to Incorporate Into Their Lesson Plans That They Anticipate will Lead to Increased Student Ability to Complete Assignments Independently......................... 108

Summary of Findings.................................................................................. 112

V. SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS....... 115

Interpretation of Research Question Results.................................................. 116

Research Question 1: What are Teachers’ Cognitive Processes While Planning Lessons After Having Participated in Professional Development?............................................................................ 116
<table>
<thead>
<tr>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 2: How Have Teachers’ Cognitive Processes Changed or Evolved After or During the Process of Participating in Professional Development?</td>
</tr>
<tr>
<td>Research Question 3: How do Teachers Apply Strategies From Professional Development for Improving Student Achievement When Planning Lessons?</td>
</tr>
<tr>
<td>Research Question 4: What Student Responses do Teachers Expect From the New Practices They Incorporate Into Their Lesson Plans?</td>
</tr>
<tr>
<td>Interpretation of Teacher Orientation to Coaching Themes</td>
</tr>
<tr>
<td>Limitations and Recommendations for Future Research</td>
</tr>
<tr>
<td>Comparison of Major Findings to Previous Research</td>
</tr>
<tr>
<td>Major Findings and How They Relate to Previous Research</td>
</tr>
<tr>
<td>Implications</td>
</tr>
<tr>
<td>Teachers</td>
</tr>
<tr>
<td>Administrators</td>
</tr>
<tr>
<td>Application to Other Professional Fields</td>
</tr>
<tr>
<td>Closing Thoughts</td>
</tr>
<tr>
<td>REFERENCES</td>
</tr>
<tr>
<td>APPENDICES</td>
</tr>
<tr>
<td>A. Superintendent Participant Recruitment Letter</td>
</tr>
<tr>
<td>B. Teacher Participant Recruitment Letter</td>
</tr>
<tr>
<td>C. Participant Consent Form</td>
</tr>
<tr>
<td>D. Initial Interview Protocol</td>
</tr>
</tbody>
</table>
APPENDICES

E. Final Interview Protocol ................................................................. 160

F. Interview Protocol for Instructional Coach ........................................ 162

G. Coaching Conversation Questions Used by Instructional Coach
   Study Participant .............................................................................. 164

H. Western Michigan University Human Subjects Institutional Review Board .......... 167
**LIST OF TABLES**

1. School A Demographics ........................................................................................................... 71
2. Participant Profiles .................................................................................................................... 74
3. First and Second Cycle Analysis Codes .................................................................................. 85
4. Teacher Participant Orientation to Coaching Themes ............................................................. 86
5. Summary of Findings With Illustrative Quotes ....................................................................... 109
6. Comparison of Corlett’s Themes With Previous Research .................................................... 123
LIST OF FIGURES

CHAPTER I
INTRODUCTION TO THE STUDY

School districts across the country are facing increasing pressure to raise student achievement, specifically on state standardized tests (Buzick & Jones, 2015; Marsh & Farrell, 2015). Many states, including Michigan, connect teacher and administrator evaluations to student achievement (Revised School Code Act 451, 2003). The primary strategy school districts use in an attempt to improve student achievement is professional development for its staff (Guskey, 2009). Professional development can consist of a variety of strategies to support educators in increasing their knowledge and skills, resulting in improved instruction and ultimately improved student achievement.

The challenge with professional development is that while it is the primary strategy districts use to implement change, there is little “valid and scientifically defensible” research to support the characteristics of professional development that improve student achievement (Guskey, 2009). In my dissertation, I explored effective professional development in the form of instructional coaching, as well as how teachers approach lesson planning and apply what they have learned during the lesson planning process. In this study, *effective professional development* is defined as professional development that results in changing teacher practice and improving student achievement. In Chapters I and II, I explore previous research on the characteristics of professional development that have been found to improve student achievement and inform the purpose of this study. Guskey’s (2009) criticism of current research being “valid” is due to the multifaceted nature of school improvement, which makes it difficult to isolate the effectiveness of a single innovation such as professional development. Schools may have multiple initiatives, including implementation of new curriculum programs, new supplemental programs or supports,
professional learning communities, or a variety of professional development on topics ranging from literacy practices to social-emotional learning.

Many studies have focused on the characteristics of professional development initiatives that contribute to their success in changing teacher practice. These characteristics include:

- A positive teacher attitude (Erickson et al., 2005; Scott, 2009).
- A connection of professional development to the context of teacher work (Hunzicker, 2011; Mundry, 2005).
- The importance of collaboration (Guskey, 2003; Parise & Spillane, 2010).
- Job-embedded (Hunzicker, 2011; Mundry, 2005).
- A focus on content and its application to the classroom (Guskey, 2003; Hunzicker, 2011; Jones & Lowe, 1990).

Generally, these strategies are effective in changing teacher practice when used “in everyday experiences, such as in classroom settings” and when teachers are supported through collaboration (Glazer & Rattigan, 2006, p. 180).

Instructional coaching is a professional development approach that incorporates all of the above-mentioned characteristics. Instructional coaching is defined as “goal setting, questioning, and data gathering typical of one-to-one coaching and integrated with explanation, modeling, and feedback” (Knight & Van Nieuwerburgh, 2012, p. 105). Instructional coaching differs from mentorship, as mentorship implies a more hierarchical relationship, while coaching suggests a partnership in which the coach encourages growth (Salavert, 2015). Instructional coaching is the application of the partnership approach, which keeps spontaneity at its core. This type of coaching is an adaptive process that provides teachers a framework rather than a blueprint for
instruction, supported by teacher and coach dialogue to explore ways the teacher can apply evidence-based practices in ways that fit the students and learning objectives. As such, the coaching content is adapted by the coach to fit specific situations (Knight & Van Nieuwerburgh, 2012, p. 105).

According to Knight and Van Nieuwerburgh (2012), the following components are usually involved in instructional coaching: “goals, high leverage practices, explicit explanations, modeling, and deliberate practice and progress towards the goal” (p. 105). When considering the wide variety of possible initiatives that may be vying for teacher consideration, the question arises of how do teachers decide what to put into action within the classroom? Instructional coaching is intended to help guide a teacher’s improvement of instruction; however, how teachers apply what they learn into day-to-day practice remains an open question requiring further examination. Previous studies on a variety of professional development topics and delivery styles point to what forms of professional development can be associated with improved student achievement. Direct impact of specific professional development programs and strategies have been difficult to isolate because of the limitations for creating controlled studies that would distinguish the effect of a given professional development program or practice on student outcomes. However, it is possible to gain insight into the cognitive processing of teachers and how they make sense of the learning garnered from professional development and its application to the classroom. It is also possible to directly observe how teachers apply professional development learning to their instruction through both teaching observations and cognitive debriefing. One promising source of such insight is the examination of teacher decision making while developing lesson plans or other forms of instructional planning.
Lesson plans are foundational to what teachers do daily, as they serve as the “roadmap, blueprint, or game plan” (Jensen, 1991, p. 403) for teachers. Lesson plans act as a guide of what to teach and a historical document of what has been taught. They reflect “our teaching philosophy, student population, textbooks, and most importantly, our goals for our students” (Jensen, 1991, p. 403). As the “blueprint” for instruction, lesson plans are a good place to look to identify the direct application of the training teachers received during professional development. For instance, lesson plans can demonstrate what strategies teachers will utilize during instruction and compare those strategies to those put forth in the professional development experience. Just looking at lesson plans, however, can miss the important cognitive understandings regarding how teachers: (a) make sense of what they learn in the professional development experience and (b) how they make decisions regarding why, when, and how to apply what they learn. My study sought to gain further understanding of the cognitive process of teacher decision making when creating lesson plans and how they consider the application of learning gained from professional development. These insights will benefit educational leaders in supporting teachers through professional development by providing a better understanding how teachers apply what they have learned.

**Problem Statement**

Pointing out a discrepancy in previous research, Guskey (2009) identified that a major problem in understanding professional development is the difference “between our beliefs about the characteristics of effective professional development and the evidence we have to validate those beliefs” (p. 224). He went on to say that part of this problem is a result of the difficulty in conducting research on professional development. In order for studies on professional development to be rigorous, they must be sustained and therefore require a considerable amount
of time and resources. Even when done well, “clear and unequivocal results can be elusive. For this reason, many researchers shy away from studies of professional development and instead choose areas of investigation where results come quickly and can be verified easily” (Guskey, 2009, p. 226). Professional development is challenging to understand because the results from research are not clear due to multiple possible variables affecting results such as multiple school initiatives taking place simultaneously or variations in student populations. This leads researchers to, as Guskey (2009) said, “shy away” from researching it.

Despite these challenges, there is extensive literature that currently exists on professional development, providing insight on successful implementation and its effect on teachers. However, there are conflicting results concerning its actual effect on student achievement. Many professional development characteristics have been found to change teacher practices such as the list of characteristics included in the introduction. Lists similar to the list above appear throughout the literature and will be discussed more in-depth in Chapter II; however, the challenge is that there are no definitive conclusions because professional development effectiveness and needs vary based on the circumstance and context of specific schools (Guskey, 2003). Furthermore, research that provides insight on how teachers apply learning from professional development that contains these characteristics is lacking. Guskey (2002) stated that more research needs to be done to help find creative ways for teachers to apply new knowledge into practice. The purpose of this study was to provide insights into how teachers apply new knowledge, which would assist educators in finding these creative ways Guskey (2002) argued are needed to improve teacher practice.

Teacher practice begins with the lesson planning process. Teachers are burdened with the pressure of using research-based practices that they learn about at conferences or journals such as
focused classroom discussions, as well as the pressure from school administration to focus on scripted education and test preparation (Boyd, 2012). Beyond the pressures regarding lesson planning, research has found that teachers have not received adequate training on how to lesson plan beyond selecting activities to perform in class (Mundry, 2005).

Studying the cognitive planning process of teachers is a challenge as it is a “covert, tacit” process (Kremer, 1981, p. 21). Research regarding teacher planning starts with understanding how they were taught to lesson plan in teacher preparatory university programs. Hall and Smith (2006) found that most teacher preparation programs focus on using a template and encourage preparatory teachers to follow scripted plans. They concluded that teaching behavior is “influenced and determined by teachers’ thought processes” (Hall & Smith, 2006, p. 424). Based on these findings, Hall and Smith (2006) recommend that future studies focus on teachers’ thoughts and actions using case studies that are able to link planning, instruction, and reflection in a natural setting (p. 424). They further stated, “It is important to note that while a few studies link planning with instruction, very little research has been conducted examining planning, instruction, and reflection as a holistic process” (Hall & Smith, 2006, p. 425), which is what I designed this study to do.

Research is available regarding how teachers approach lesson planning differently as they gain experience in the classroom. One study found that having several years of previous teaching experience allows teachers to be better prepared in planning lessons, as they can pull from previous experience (Schmidt, 2005, p. 21). Having this previous experience, however, does not “guarantee expertise” in lesson planning (Schmidt, 2005). Schmidt’s (2005) study focused on the understanding of preservice teachers towards planning and revealed that preservice teachers struggled to transfer strategies taught in preservice classes to the class that they taught. The
researcher also found preservice teachers struggled with how to begin planning and had difficulty using written lesson plans (Schmidt, 2005). Moreover, the preservice teachers who participated in the study found it beneficial to reflect on the success of a lesson when planning instruction for their next lesson (Schmidt, 2005). This is significant, demonstrating that there has been interest within the field of education regarding the thought process of teachers when planning lessons. However, I did not find a study examining how teachers apply coaching recommendations to their lessons as a consideration in learning more about how teachers generally apply what is learned during professional development.

**Significance**

The significance of the current study lies in the important role of professional development in school improvement initiatives, the extensive investment of time and money in it, along with the time, work, and emotional toll that is required of teachers when participating in it. Previous research has found that larger scale professional development initiatives such as professional learning communities have been found to be more effective in sustaining change in teaching practices with “labor intensive training,” rather than consisting of short-term trainings (Slider et al., 2006, p. 216). Also, professional development that is effective in changing instruction is labor intensive, as it requires “directed rehearsal and performance feedback” (Slider et al., 2006, p. 216). Professional development, in order to have long lasting effects, is difficult and requires a lot of hard work and commitment over a period of time.

The significance of this study is supported in part by the amount of time and money districts invest in professional development. On average, districts spend $7,700 a year per teacher or 7.8% of their school operating budgets on professional development, which is a significant level of spending (Fermanich, 2002). Providing professional development is a
necessity for school districts, as state statutes often prescribe a specific amount of professional development for teachers on an annual basis. For instance, in Michigan, teachers are required to participate in 30 hours of professional development each year.

Personal growth, however, does not come without taking an emotional toll on teachers. Previous studies have provided insight into the emotions teachers can have when participating in professional development. One study found that teachers have “strong and mixed emotions when professional development affects their classrooms directly” (Scott, 2009, p. 167). Because of the emotional investment of teaching staff, districts need to be intentional in planning professional development to ensure it is done effectively to meet the needs of teachers. Along with planning professional development that is relevant for teachers, districts should be cognizant of factors that cause the emotional toll teachers might experience due to professional development.

Professional development is significant in its potential ripple effect on the instructional practices of an entire school building or district. The effects of professional development can be far-ranging, beyond simply changing a single teacher’s practices. Previous studies have demonstrated that not only teachers who participate in professional development have improved instructional practices, but there is a “spillover” effect where the colleagues of teachers benefit from their colleagues attending trainings (Sun et al., 2013, p. 345). One study found that professional development that utilizes collaboration as a means to improve instruction develops “individual teachers’ expertise in enacting high-quality writing instruction and facilitate the diffusion of new expertise” (Sun et al., 2013, p. 361). Essentially, when teachers improve their teaching practices, they share these improvements with their colleagues who then benefit from that personal growth (Jones & Lowe, 1990). The spillover effect is also reinforced by findings
that students have higher test scores when their teachers have stronger peers (Jackson & Bruegmann, 2009).

Focusing on the specific professional development strategy of instructional coaching allows the focal point of the study to be a strategy that shares characteristics of effective professional development listed above, as well as one that is gaining in use by school districts. As mentioned earlier, professional development is more effective in improving teacher instruction when job-embedded, and instructional coaching is a form of job-embedded professional development that is “promising, but as yet under-researched” (Taylor, 2008). In Michigan, a task force created by the Michigan Association of Intermediate School Administrators (MAISA) and General Education Leadership Network (GELN) to improve early literacy developed a guide on instructional coaching for schools (MAISA, 2016). This guide recommends that all school districts throughout Michigan use the instructional coaching model to improve literacy within their schools (MAISA, 2016).

This, then, leads us to ask, how do teachers improve their teaching practices through the application from professional development? Although there is an extensive amount of literature on effective professional development, none could be found that has addressed the role of professional development in the lesson planning process. My study provides insight into the process of planning lessons and how teachers consider the training they have received from professional development during the lesson planning process. These insights may help educational leaders better understand how to improve professional development, as well as help teachers improve their lesson planning process.
Purpose Statement and Research Questions

The purpose of this instrumental qualitative case study is to examine teachers’ experiences with the lesson planning process after having participated in the professional development activities of instructional coaching.

The specific research questions guiding my study are:

1. What are teachers’ cognitive processes while planning lessons after having participated in professional development?
2. How have teachers’ cognitive processes evolved after the process of participating in professional development?
3. How do teachers apply strategies from instructional coaching professional development for improving student achievement when planning lessons?
4. What student responses do teachers expect from the new practices they incorporate into their lesson plans?

Conceptual Framework

To answer the main research question of how teachers experience instructional planning after participating in professional development, specifically instructional coaching, creation of a conceptual framework that considers previous research on the subject along with the focus of the study was necessary to answer the question. Exploring the instructional planning process begins first in understanding what previous studies have found. Understanding the connection between the instructional planning process and professional development also requires insight on previous studies concerning professional development. Specifically, understanding focused on the characteristics of effective professional development and its effect on teachers including previous research on how teacher practice changes, which is the goal of professional
development, was necessary. Exploring previous studies on instructional coaching and why that professional development approach is considered effective in improving teacher instruction also contributed to the conceptual framework of this study. The findings from these studies not only provide the characteristics of effective instructional planning and professional development that make their understanding relevant to today’s educators, but also aid in understanding the experience of teachers in this current study, as illustrated in Figure 1.

Figure 1

*Conceptual Framework of Teacher Lesson Planning and Coaching Process*
The conceptual framework demonstrates the instructional coaching cycle of teachers receiving coaching, planning their lessons, and then receiving feedback on their instruction in an ongoing process. With the instructional coaching approach, teachers receive instructional coaching support using a variety of practices before and after they create lesson plans. Within the top circle of the conceptual framework is the research on characteristics of effective professional development and effective instructional planning that informs our understanding of professional development as a whole and how instructional coaching falls under that umbrella.

The Instructional Coaching aspect of the framework represents a summary of the practices used by instructional coaches, the use of which is supported by the literature on the characteristics of effective professional development in improving teacher instruction, as the practices of conferencing, modeling, applying assessment literacy, observing and co-planning are supported by previous research. This research includes effective professional development traits, such as a positive teacher attitude toward the relevance of the professional development beforehand and reflecting on it afterward in sustaining change (Erickson et al., 2005; Scott, 2009); a connection of professional development to the context of their work (Hunzicker, 2011; Mundry, 2005); the importance of collaboration (Guskey, 2003; Parise & Spillane, 2010); ongoing and sustained professional development (Bayar, 2014; Erickson et al., 2005; Hunzicker, 2011; Jones & Lowe, 1990; Mundry, 2005), job embedded professional development (Hunzicker, 2011; Mundry, 2005); and a focus on content and its application to the classroom (Erickson et al., 2005; Guskey, 2003; Hunzicker, 2011; Jones & Lowe, 1990). Exploring these commonly found characteristics in professional development, which research has shown can be effective in improving teacher instruction, provides a lens for understanding the use of instructional coaching and how teachers apply what they learn to their lesson plans, which was
the purpose of my study. We approached this study with the acknowledgment that if participating teachers are experiencing professional development considered effective in positively changing teacher instruction, this should affect their experience of instructional planning in a different manner than it would if the professional development was lacking these characteristics.

As previously stated, the purpose of this study was to provide insight on the experience of planning instruction after participating in an instructional coaching process that is designed and delivered in concert with the features identified by research to be associate with effective professional development, not to identify a cause-and-effect relationship, but to provide a greater understanding of how teachers make decisions during the instructional planning process. Additionally, this study examined how the information or strategies shared during the coaching professional development experience may influence the lesson planning process. By ensuring that study participants are engaged in professional development that meets the characteristics of effective professional development, this research had a greater opportunity to discover how teachers draw upon their professional development experience during their instructional planning processes.

The bottom circle of the conceptual framework represents the planning of lessons that occurs after teachers participate in the professional development activity of instructional coaching. Within this circle is the research on effective instructional planning, as well as research on teachers’ cognitive processing when planning instruction, which provides the lens for understanding the cognitive processing of lesson planning of the teachers who participated in this study. It was important to fully explore these effects of professional development to provide insight into the cognitive process of teachers and how a change of instruction occurs. Again, the
attitude of teachers towards professional development initially impacts their buy-in, and their reflection on it afterward affects its lasting effect (Erickson et al., 2005; Scott, 2009). However, it is important to also note that professional development has repeatedly been shown to have potential in changing teacher practice (Gregory et al., 2014; Guay et al., 2016; Parise & Spillane, 2010; Shepardson & Harbor, 2004). Teachers are more willing to implement the strategies taught in professional development if they see that those strategies improve student achievement (Guskey, 2002), the awareness of which may impact their attitude toward professional development.

Listed at the bottom of the bottom circle is research on instructional planning. Previous research has found that there is an ongoing lack of adequate training in teacher preparatory programs concerning planning (Borko et al., 1981; John, 2006; Marlow, 2004; Panasuk & Jeffrey, 2005; Schmidt, 2005; Shavelson, & Borko, 1979; Skowron, 2001). Research on lesson planning has also explored recent trends of considerations to make when lesson planning, including a focus on learning goals (Jones & Vermette, 2009; Marlow, 2004; Reigeluth, 1999), differentiation (Linder, 2010; Lynch & Warner, 2008; Marlow, 2004; Merrienboer et al., 2003; Van Garderen & Whittaker, 2006), and motivating different types of students (Keller, 2000).

All three of these outer circles work and influence each other in developing a conceptual framework, as characteristics of effective professional development must be considered while investigating teachers’ approaches to instructional planning and change in teacher practice. The findings of many of these previous studies overlap and apply in more than one area. They also must all be considered when attempting to understand the circle in the very center of Figure 1, which is this study’s central research purpose; that is, to research how teachers experience the
instructional planning process after participating in professional development that meets the characteristics previous research attributes to effective professional development experiences.

**Reflections on My Identity**

Creswell (2013) noted that philosophical assumptions are typically first ideas in developing a study, but they also relate to the overall process of research. I personally relate to the study topic and purpose, as I am currently a K-12 superintendent, former elementary principal, former district curriculum director, and a former high school English teacher. As an administrator, it is my responsibility to provide professional development for the teachers in my district or building. My work experience as an administrator has provided me with insight into the importance of professional development for teachers and the difficulties in planning it, as well as the difficulties teacher have in implementing what was learned.

My experience as a school administrator has inspired me to explore how we can improve professional development by understanding how teachers apply it when planning instruction. This research could inform how schools provide professional development, specifically instructional coaching, by using practices that meet teacher needs and anticipating how they would apply that knowledge.

To manage the predispositions I have towards planning and implementing professional development, I explored my experience and thoughts towards topics referred to during interviews and bracketed my response in the transcriptions of these interviews. I believe that effective professional development is essential for the growth of teachers, and that the application of information provided during professional development is generally inconsistent by teachers. I am personally interested in the topic of how teachers experience planning instruction after involvement in professional development. I hope to provide insight that will assist teachers
in understanding their own thought processes and, ultimately, inform how teachers and school leaders work together to improve instruction. I also hope my findings will assist professional development providers in improving their effectiveness in helping teachers translate what is learned in the professional development experience to the planning and delivery of classroom instruction.

I also identify my interpretive framework in approaching this research as being social constructivism. My intent as a researcher can be defined is Creswell’s (2013) description of social constructivism as being to “make sense of (or interpret) the meanings others have about the world,” which is shaped by my own “experience and background” (p. 25). By identifying beforehand my reliance on interpreting others’ experiences and identifying patterns in those experiences by using the social constructivism framework, I can be more intentional in avoiding bias. Although the constructivist worldview is more commonly utilized in phenomenological and grounded theory studies, it is essential to my case study in providing insight into teachers’ experiences with planning instruction.

Using the social constructivist framework, I avoided biases in my research by not recruiting participants under my direct supervision. I also avoided asking teachers leading questions on their view of how effective professional development is. Instead, I focused my questions on the application of learning from professional development and participants’ thoughts on the cognitive process of making that application. I wrote reflections similar to the systematic reflections that Marshall and Rossman (2016) recommended to sustain sensitivity to my own biography and how it shapes the study. These reflections were written during the data analysis stage as I analyzed the various forms of data collected during the study in search of patterns.
Methodology

This study used a qualitative, instrumental case study approach to provide insight into the process of lesson planning and consider applying strategies from professional development they have participated in. To explore patterns and themes evident in the collected data, I used an inductive analysis approach. Data collection within the research design included teacher observation of professional development, face-to-face interviews, and the analysis of this data to identify themes. Chapter III elaborates on the details of data collection, as well as the use of inductive thematic analysis of data.

Chapter I Conclusion and Summary

The purpose of this study was to provide additional information to the literature that will be beneficial to leaders in education, specifically those that facilitate professional development and are instructional coaches, as well as leaders in higher education who oversee teacher preparatory programs. Previous research on professional development has focused on the characteristics that make it effective in increasing student achievement and improving teacher instruction. Previous lesson planning research has focused on elements teachers should consider including in their plans. This study provides information on how a teacher experiences the lesson planning process after participating in professional development. The results produced recommendations regarding how to improve professional development in the future and how to support teachers applying learning from professional development into their daily practice.
CHAPTER II

LITERATURE REVIEW

In Chapter I, I provided a brief overview of the main components that justify the relevance and significance of research on how teachers experience instructional planning after participating in professional development through instructional coaching. These components consist of previous research and the analysis of professional development and instructional planning. Previous research focused primarily on the characteristics of professional development that made it effective in changing teacher instruction and improving student achievement and instructional planning, with the intent of improving these processes for teachers’ future work. This study intends to contribute to further understanding of how teachers apply the knowledge and skills gained during professional development in their instruction by exploring their cognitive process of planning instruction.

This literature review will further explore the components that were explained in the conceptual framework of Chapter I. The conceptual framework illustrates the relationship between professional development and lesson planning processes and how they support the central research question. These components will be expanded in the following literature review by conducting an in-depth analysis of each topic by interpreting previous research findings and synthesizing those findings. This will provide further detail to the conceptual framework described in Chapter I, serving as a lens for understanding the purpose and results of this study. Therefore, the literature review includes exploration of the importance of professional development, characteristics of professional development found to be effective by research, how teachers participate in it, and how it has influenced teachers. I also present the connection found in research that exists between professional development and planning instruction, along with
findings on the best practices of instructional planning. Finally, I conclude the literature review exploring how theories on adult learning and decision making contribute to understanding the research on change in teacher practices after participating in professional development.

**Importance of Professional Development**

Serving as a powerful tool for schools, professional development’s primary purpose is to increase student achievement through the improvement of teacher instruction, as professional development has been found to improve teacher instruction (Fishman et al., 2003). Notably, there is a direct connection between quality teacher instruction and student achievement (Ballard & Bates, 2008). Student achievement is measured primarily by standardized assessments, and although many factors impact standardized assessment scores, a clear link has been found between instruction and student performance on standardized tests (Ballard & Bates, 2008; Fishman et al., 2003). This well-known connection motivates educational leaders to plan professional development efforts that are linked to “student-focused learning and school improvement goals” (York-Barr & Duke, 2004, p. 290). Educational leaders face the challenge of continually evaluating the “fluid” needs of their schools, resulting in the importance of teacher leaders to help identify those changing needs that are reflected in school improvement goals (York-Barr & Duke, 2004). Evaluating the needs of the school is associated with another primary role of school leaders; namely, defining good practice (Spillane et al., 2001). The definition of good practice is then transmitted to instructional staff through various forms of professional development. Regardless of the professional development’s form, which will be explored below, the most important measure of whether professional development is effective or “working” is whether “teacher enactment yields evidence of improved student learning and performance” (Fishman et al., 2003, p. 655).
Previous Studies on Professional Development

Professional Development Definition

Despite increasing interest in professional development within the education field, there is no agreed-upon definition of the term professional development (Buysse et al., 2009). As a result, a wide variety of formats and a wide variety of professional development provider qualifications arise that can lead to confusion and uneven learning opportunities (Buysse et al., 2009). The most thorough definition found for the field of education comes from the National Professional Development Center on Inclusion (NPDCI), which includes the who, what, and how. According to NPDCI, *professional development* is defined as:

Professional development is facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice. The key components of professional development include (a) the characteristics and contexts of the learners (i.e., the who of professional development, including the characteristics and contexts of the learners and the children and families they serve), (b) content (i.e., the what of professional development: what professionals should know and be able to do, generally defined by professional competencies, standards, and credentials), and (c) the organization and facilitation of learning experiences (i.e., the how of professional development: the approaches, models, or methods used to support self-directed, experientially oriented learning that is highly relevant to practice). (NPDCI, 2008)

Buysse and colleagues (2009) wrote a paper describing the process that they used in collaboration with NPDCI to develop this definition. Their paper found that the most common forms of collaborative professional development include “coaching, consultation, mentoring,
lesson study, reflective supervision, technical assistance, and communities of practice” (Buysse et al., 2009, p. 241). The current popularity of these forms is the result of years of research, which will be explored below, regarding what forms “work.”

**Previous Research on Effective Professional Development**

Over the past 20 years, professional development shifted from one-time workshops generalized for an entire school’s staff, to ongoing, subject focused workshops taking place during the school day (Mundry, 2005). Borko (2004) categorized previous research on professional development in three different phases. The first phase focused on specific professional development programs within a single school, while the second phase focused on professional development programs provided at multiple schools. Finally, the third phase compared the effectiveness of multiple professional development programs offered to teachers (Borko, 2004). In her review of professional development literature, she found that most of the phase one research included findings related to the idea that teachers must have a thorough understanding of the subject they teach in order to improve student understanding (Borko, 2004). In addition, phase one research highlighted the importance of the context of training; namely, whether it is conducted in one’s own classroom or elsewhere (Borko, 2004). Her review of research related to phase two concluded that professional development must have specific goals, including outcomes and descriptors of what effective teaching looks like after undergoing training (Borko, 2004). Phase three is an area that Borko recommends for future study, as at the time of her literature review, she was not aware of research that compared the effectiveness of multiple professional development programs (Borko, 2004).

Findings that support the importance of continuing professional development rather than a one-time experience such as a one-day workshop have led to exploring different models of
continuing professional development (Bayar, 2014; Hunzicker, 2011; Jones & Lowe, 1990; Mundry, 2005). In fact, there is even support for the amount of time needed for teachers to practice skills acquired through professional development, with Joyce and Showers (2002) stating they estimate teachers need to practice skills over a span of 8 to 10 weeks and involving around 25 trials where teachers can practice skills. They also found that teachers who received coaching after training were able to practice strategies more and with greater skill than those who did not (Joyce & Showers, 2002).

Educators adopt different models of continuing professional development for different contexts and needs. These models include: (1) the deficit model, which is intended to remedy the perceived weaknesses of individual teachers; (2) the standards-based model, intended to align instruction to standards; (3) the transformative model, designed to transform practice; (4) the community of practice model, which emphasizes growth as a community; and (5) the cascade model, which focuses on individual teachers attending trainings who then return to train their colleagues (Kennedy, 2005). These models are all based on identified needs; however, they vary depending on the focus of the leadership and intended purpose, which may include factors other than student achievement, such as the perceived deficiencies of teaching staff (Kennedy, 2005).

Other measures besides student achievement are used to measure the effectiveness of professional development. These include whether teachers made changes to their instruction and if teacher perception of the professional development was positive. According to Boyle et al. (2005), “The data suggests, reassuringly, that the majority who do participate in longer term professional development do change one or more aspects of their teaching practice” (p. 22). Teacher attitude or perception not only contributes to identifying the focus of professional development and as a tool of researchers to measure its effectiveness, but positive teacher
attitude also contributes to how well-received the professional development is by teachers and, therefore, more likely to lead to improved instruction (Erickson et al., 2005; Scott, 2009).

**Instructional Coaching**

As mentioned earlier, professional development is more effective in improving teacher instruction when job-embedded, and instructional coaching is a form of job-embedded professional development that is “promising, but as yet under-researched” (Taylor, 2008). The use of instructional coaching initiatives by school districts to improve instruction are increasingly common (Gallucci et al., 2010). In fact, the increased use and research on instructional development recently are so significant that the Early Literacy Task Force, a subcommittee of the Michigan Association of Intermediate School Administrators (MAISA) and General Education Leadership Network (GELN), developed an instructional coaching guide to improve literacy for schools throughout Michigan (MAISA, 2016). The purpose of this guide, entitled *Essential Coaching Practices for Elementary Literacy*, is to “increase Michigan’s capacity to improve children’s literacy by identifying a small set of research-supported literacy coaching practices that should be a focus of professional development throughout the state” (MAISA, p. 1, 2016). The fact that a collaboration representing Michigan’s 56 intermediate school districts is recommending every school district in the state to utilize this professional development approach is a strong statement to its perceived effectiveness. The purpose statement goes on to say that “literacy coaching can provide powerful job-embedded, ongoing professional development with a primary goal of enhancing classroom literacy instruction through improving teacher expertise” (MAISA, p. 1, 2016).

*Instructional coaching* is defined as “goal setting, questioning, and data gathering typical of one-to-one coaching are integrated with explanation, modeling, and feedback” (Knight & Van
Nieuwerburgh, 2012, p. 105). Instructional coaching differs from mentorship, as mentorship implies a more hierarchical relationship while coaching suggests a partnership in which the coach encourages growth (Salavert, 2015). Instructional coaching is the application of the partnership approach that views coaching as a process that can produce a framework rather than a blueprint for a teacher’s instruction and is adapted by the coach to fit specific situations. (Knight & Van Nieuwerburgh, 2012, p. 105). The following components are usually involved in instructional coaching: “goals, high leverage practices, explicit explanations, modeling, and deliberate practice and progress towards the goal” (Knight & Van Nieuwerburgh, 2012, p. 105).

One of the leading researchers of instructional coaching, Jim Knight, explains that the approach is intended to provide assistance to teachers in supporting and choosing research-based strategies to improve their instructional and student achievement (Knight, 2009). This support is in the form of intense and differentiated methods that can be in a small group setting; however, it is recommended that this method be administered in a one-to-one format and be at least 45 to 60 minutes long (Knight, 2009). Instructional coaches develop goals with teachers specific to the needs of their classrooms and use coaching activities such as conferencing, modeling, observing, and co-planning to support the teacher in meeting those goals (MAISA, 2016).

In the GELN guide, *Essential Coaching Practices for Elementary Literacy*, seven essentials for effective implementation of instructional coaching are listed. These essentials have been found to result in increased student literacy learning and are as follows:

1. Effective literacy coaches have specialized literacy knowledge and skills beyond that of initial teacher preparation.

2. Effective literacy coaches apply adult learning principles in their work.
3. Whether working with large groups, small groups, or individual teachers, effective literacy coaches demonstrate specific skills and dispositions in order to engage teachers and build collaborative relationships.

4. Literacy coaching is most effective when it is done within a multi-year school-wide or district-wide initiative focused on student learning and is supported by building and district administrators.

5. Effective literacy coaches spend most of their time working with teachers to enhance teacher practice and improve student learning. They make effective use of their time by using a multi-faceted approach to coaching.

6. When coaching individual teachers, effective literacy coaches employ a core set of coaching activities that are predictors of student literacy growth at one or more grade levels.

7. Effective literacy coaches are integral members of literacy leadership teams at the school and/or district level. (MAISA, 2019, pp. 2-5).

All of these practices are supported with research referenced within the GELN guide and are likely to be used by the instructional coach participating in my study.

Effective Professional Development Meets District and Teacher Needs

Effective professional development is not only aligned to the needs of the entire district, for example the shared focus of PLCs, but must also be supportive of the needs and interests of individual teachers (Hunzicker, 2011). Teachers are motivated and have a positive attitude towards professional development when it addresses their current needs in the classroom (Hunzicker, 2011). Professional development that includes strategies that can be immediately applied in the classroom is considered to be job-embedded, which makes the professional
development relevant (Erickson et al., 2005; Hunzicker, 2011; Mundry, 2005). Meeting the individual needs of teachers, as well as the overall needs of the school, is a difficult balance for educational leaders to make.

Professional development that matches both teacher and school needs can be accomplished through the involvement of teachers in the planning of activities. Teacher involvement in planning professional development increases their ownership. Moreover, research has found teacher involvement to be an effective characteristic of professional development (Bayer, 2014; Erickson et al., 2005).

Teachers are also motivated by having high-quality instructors who are knowledgeable, respected by teachers, and will meet their needs (Bayer, 2014). The instructors of professional development may be external providers such as a third-party provider, an independent training expert, or a contracted service through an intermediate school district. They may also include internal leaders such as building administrators or teacher leaders. Regardless, teachers are more motivated to participate and believe the trainer can meet their specific needs if the teachers perceive the trainer to be knowledgeable (Bayer, 2014). The involvement of school leaders such as building administrators or teacher leaders, however, has been found to make professional development more likely to be effective through motivating teacher participation (Boudah et al., 2001).

**Professional Development Barriers for Educational Leaders**

Educational leaders are faced with the challenge of planning professional development that contains all of these characteristics (i.e., job-embedded, collaborative, ongoing, focused on content, and application to the classroom) in an effort to be effective in improving teacher instruction and raising student achievement. If they can plan professional development that
includes these characteristics, they are faced with multiple challenges including how to sustain it so it remains long term. Research has shown that having money and time to sustain professional development is a barrier that districts often face (Boudah et al., 2001).

Although we have discussed how professional development should be long term in order to be effective in promoting instructional change (Boyle et al., 2005), there are multiple barriers to sustaining professional development long term. Along with the barriers of time and money, another barrier for educational leaders is the lack of immediate change. Guskey (2002) encouraged educational leaders to understand that change brought about through professional development is gradual and difficult for teachers. Also, implementation of new programs is never uniform, as context varies in every school district, requiring leaders to adapt programs to meet the specific needs of their schools (Guskey, 2002). Although change is slow, challenging, and may look different across schools based on their context, teachers are inspired to continue the professional development work when they observe an enhancement in student achievement and receive feedback (Guskey, 2002). Educational leaders must communicate that professional development is a process, not an event and continue to provide support and pressure for teachers to sustain professional development efforts over time (Guskey, 2002).

Professional development is more likely to overcome these barriers and be well received by teachers when school administrators view themselves as instructional leaders (Jones & Lowe, 1990). When administrators believe they are instructional leaders and fill that role in their building, they are more likely to have an explicit program goal for the professional development that leads to the creation of materials that can be implemented immediately in the class (Jones & Lowe, 1990). Teachers are more likely to retain and transfer the information if activities are designed to create materials they will use immediately in their classes (Jones & Lowe, 1990).
Administrators are then successful instructional leaders when they support teachers during professional development by helping them feel safe and providing feedback and recognition that will help them grow as professionals (Jones & Lowe, 1990).

**Challenges of Studying Professional Development**

Despite the importance of professional development’s role in school change, research on professional development continues to be criticized for its shortcomings. Boudah and colleagues (2001) argued that research on effective professional development is incomplete, saying more schools need to partner with universities to continue research to make professional development less abstract of a concept. In a review of more than 1,300 studies of the effect of professional development on student outcomes, Yoon and colleagues (2007) found that only nine studies met What Works Clearinghouse’s evidence standards, with all nine of those studies being based at elementary schools and none at middle or high school levels.

Not only has research on professional development been lacking in scope, but it has also lacked in building on a common understanding of what effective professional development means. Guskey (2003) analyzed 13 different lists of characteristics of effective professional development to evaluate the extent to which they agreed. He found that researchers’ definitions of “effectiveness” varied, and that research evidence was at times contradictory. Guskey (2003) found that many studies were based on surveys, making them less reliable in connecting effective professional development to student achievement. Studies suggest professional development that is focused on teaching content is a vital part of professional development, but those studies focused primarily on mathematics and science; whether this is applicable to language arts or social studies is unclear (Guskey, 2003). Similarly, Garet and colleagues (2002) said that there are many similar lists of the characteristics of effective professional development.
that appear throughout the literature, but there is little evidence to the extent of their effect. They concluded that three activities have significant, positive effects on teacher learning including “focus on content knowledge, opportunities for active learning; and coherence with other learning activities” (Garet et al., 2002, p. 918).

According to Guskey (2002), more research needs to be done to help find creative ways for teachers to apply new knowledge into practice. Guskey (2002) further suggested that there is also a need for research that explores how to give regular feedback on student progress, as well as ways to measure teachers’ attitudes and beliefs towards professional development. The importance of teacher attitude is a theme repeated throughout the literature reviewed.

Effective professional development is reliant on alignment to the values and objectives identified by administration and teaching staff (Erickson et al., 2005). According to Erickson and colleagues (2005), however, professional development will continue to have on-going obstacles originating with the values of the school and their teaching staff, as well as the challenge of having truly collaborative projects. Teacher attitudes, in regard to collaboration and sharing values of school leaders of professional development are essential, as they are at the core of how teachers respond to training and directly related to how they will apply strategies in their classroom (Erickson et al., 2005). Teachers are more likely to participate and have a better attitude towards professional development training if they share a common purpose with it (Jackson & Bruegmann, 2009). Furthermore, teacher collaboration during professional development is dependent on mindset, which is a challenge for school leaders because of the difficulty of identifying teachers’ mindset (Jackson & Bruegmann, 2009).
Obstacles for Leaders in Planning Professional Development

School districts face multiple obstacles in providing effective professional development. School districts design professional development to address the perceived needs of their instructional staff (Kennedy, 2005). However, it is challenging for schools to provide continuing professional development that meets the specific needs of all classrooms when there are multiple causes to poor teacher performance, such as organizational and management practices (Kennedy, 2005). The focus of continuing professional development on learning standards, such as the Common Core Standards, fails to recognize the complexity of teaching to the specific needs of a classroom (Kennedy, 2005).

Another obstacle for leaders is planning continuing or ongoing professional development, which is currently a focus for school districts (Kennedy, 2005). This focus is in response to studies that found the lack of sustained training over time (Lieberman, 1995). Contributing to the lack of sustained training are financial restrictions and time constraints (Zimmerman & May, 2003). Over 200 principals surveyed shared that they recognize the value of professional development, but along with the challenge of money and time was the lack of “substitute teachers, contractual issues, lack of human resources, and lack of presenters” (Zimmerman & May, 2003, p. 41). Principals consistently reported that the majority of professional development time went towards district initiatives rather than the individual needs of their school building (Zimmerman & May, 2003).

School leaders have also faced the obstacles of finding qualified trainers and balancing multiple initiatives when planning professional development. These obstacles have led to common ineffective practices that include professional development that historically has lacked qualified trainers, lacked focus on innovation and the specific contexts of schools, and lacked
being in the form of support in the classroom rather than a workshop format (Lieberman, 1995). In short, the obstacles of planning professional development prevent teachers from gaining skills and learning that may be applied to their lesson planning.

**Lesson Planning**

Lesson plans are at the core of what teachers do in the classroom (Jensen, 1991). *Lesson plans* are “a process of preparing a framework for guiding teacher action, a process strongly orientated toward particular action rather than, say, knowledge or self-development. In this view, the planning process involves teacher thinking, decision making, and judgment” (Clark & Yinger, 1979, pp. 8-9). Since the planning process involves “teacher thinking, decision making, and judgment” it, therefore, makes a logical focus for a study, with a purpose to provide insight on how teachers consider concepts delivered through professional development training. As the above quote demonstrates, the focus of lesson plan studies has traditionally been on outlining the actions of teachers within the classroom. More specifically, research on lesson planning has focused on best practices for instruction to meet student needs, such as meeting the needs of a multicultural classroom or multiple learning styles. This review of the literature on lesson planning develops a lens for understanding the instructional strategies teachers have been taught to include in their instructional planning or lesson plans. It also includes a review of literature on how teachers learn how to develop lesson plans during the teacher preparatory programs at university.

This study was intended to build on previous research on teachers’ cognitive processes being manifested into action through lesson planning by focusing on understanding teachers’ cognitive processes during lesson planning after experiencing professional development. Clark and Yinger (1979) stated that research on teacher planning is important for a variety of reasons,
including understanding the relationship between thought and action, the importance of planning time for administrators to consider during negotiations, the pedagogical ideas of teachers, the pressures that affect planning, and the link between curriculum and teacher behavior.

For the purpose of this study, a basic understanding of curriculum design is needed to understand the context that lesson planning occurs. *Curriculum* refers to “the subject content and skills that make up an educational program” (Kemp et al., 1998, p. 2). *Curriculum design* is “a process of formulating a specific educational platform that defines the beliefs of what should be in the curriculum” (Kemp et al., 1998, p. 2). In other words, lesson plans are the application of the content and skills set forth in the curriculum, which are then translated by teachers into action within the classroom. Teacher involvement in the curriculum or instructional design varies depending on the district, but all curricula should include the four components of objectives, methods, learners, and evaluation (Kemp et al., 1998). Regardless of teacher participation in the curriculum design process, the classroom teacher is responsible for the decision-making that translates the curriculum into action.

The importance of studying teacher decision-making can be traced back to the 1940s. In their literature review on teachers’ decisions in planning instruction, Shavelson and Borko (1979) described how research in the 1940s focused on the personal characteristics of a teacher, such as their attitudes or abilities, correlated with student achievement. They stated that from the 1950s to the late 1970s, research shifted to the correlation between the teachers’ behavior, such as the use of higher-order questions, and student achievement (Shavelson & Borko, 1979). However, they concluded that previous findings were minimal, as previous studies were limited by not taking into account such elements as teacher goals or lesson plans (Shavelson & Borko, 1979). They concluded that being familiar with instructional planning will assist teachers in
better understanding the correlation between student behaviors and planning decisions (Shavelson & Borko, 1979). In other words, the characteristics of different student groups within a classroom influence the effectiveness of specific instructional strategies.

Given conclusions within the existing literature, instructional decisions should be made while taking into consideration the student characteristics of a classroom. Research since the 1980s has focused on this aspect of instructional design. According to Borko and colleagues (1981), teachers need to better understand the “relationship between student behavior, task demands, and planning decisions” (p. 465). They concluded that teachers should understand their decision-making process for choosing strategies, as true consistency is not treating all students the same (Borko et al., 1981). This is a common misconception held by teachers, who should consider both student characteristics and environmental factors to determine instructional practices, rather than treating every group of students the same (Borko et al., 1981).

**Curriculum/Instructional Design**

Instructional design is a multi-step process that sees its roots in John Dewey, who in 1900, saw a need for “a science that could translate what was learned through research into practical applications for instruction” (Kemp et al., 1998, p. 3). Modern instructional design moves beyond the traditional approach of focusing on the content and more to the perspective of the student (Kemp et al., 1998). Instructional design considers four main components including characteristics of learners, objectives, instructional strategies, and evaluation procedures (Kemp et al., 1998).

A theory has been based on this process, which is called *instructional design theory*. Reigeluth (1999) described instructional design theory as being design oriented with the focus on learning goals rather than the focus on results of a specific activity. The theory also includes
methods of instruction and a breakdown of those methods into specific components that enhance the chances of goals being met rather than ensuring they are met (Reigeluth, 1999).

In their review of the literature, Kemp and colleagues (1998) found many common practices in planning instructional design, including the following nine steps, which do not need to be completed in order:

1. Identify instructional problems and specify goals for designing an instructional program.
2. Examine learner characteristics that should receive attention during planning.
3. Identify subject content and analyze task components related to stated goals and purposes.
4. State instructional objectives for the learner.
5. Sequence content within each instructional unit for logical learning.
6. Design instructional strategies so that each learner can master the objectives.
7. Plan the instructional message and delivery.
8. Develop evaluation instruments to assess objectives.
9. Select resources to support instruction and learning activities. (p. 5)

The step between curriculum being designed and teachers using that curriculum to create simplified objectives for lessons is the step of adopting curriculum. Ediger (2004) and Shawer (2010) both define three ways teachers approach curriculum that are similar in definition. The first is the fidelity approach, which focuses primarily on transmitting content (Shawer, 2010). In this approach, teachers rely heavily on a district selected textbook and following the objectives, learning tasks, and assessment procedures as outlined in the textbook without teacher decision-making (Ediger, 2004). The second is curriculum adaption, which is a result of the “interaction of teachers and students around curriculum materials,” meaning that teachers adjust curriculum
based on the needs of the students (Shawer, 2010, p. 2). This may include using supplemental materials or changing activities from what is planned in the textbook (Shawer, 2010). In this approach, the teacher is central to the decision-making, focusing on creating a curriculum, including objectives, learning opportunities, and assessment procedures intrinsic to the learner and learner needs (Ediger, 2004). The third approach is curriculum enactment, which is a process “jointly created” by students and teachers, meaning that teachers co-construct curriculum in an ongoing process alongside their students (Shawer, 2010, p.174). It is evident then that there is a broad spectrum of teacher involvement in curriculum development ranging from serving in the role of following a script set forth in a textbook, to co-creating the curriculum based on the developing needs, interests, and personal growth of students.

The development of curriculum serves as a professional growth opportunity for teachers (Hunzicker, 2011; Mundry, 2005). Shawer’s (2010) review of the literature found that the curriculum fidelity approach lacks teacher interaction with curriculum that promotes professional growth, as teachers using that approach simply transmit content regardless of local needs. This is why researchers encourage teachers to move beyond curriculum fidelity and to use the approaches of curriculum adaptation and curriculum making (Shawer, 2010).

The purpose of Shawer’s (2010) work was to determine why the effectiveness of one teacher varies from another, despite using the same curriculum. Shawer (2010) explored how teachers approach curriculum, as previous studies examined how teachers use textbooks, either heavily or tending to depart from them, but without understanding the teacher’s process for doing so. Therefore, teachers’ interactions with curriculum resources differ in depth and form, but, regardless, teachers develop knowledge when they interact with curriculum resources (Jones & Pepin, 2016).
The interaction between teachers and curriculum resources is two-way, “where teachers are influenced by the resources and the design of resources is influenced by the teachers” (Jones & Pepin, 2016, p.106). However, a “teacher’s pedagogical design capacity is dependent, at least to some extent, on the particular resource being used... and on the ways of working, individually or collectively, with the resource” (Jones & Pepin, 2016, p.107). These studies on how teachers differ in their application of curriculum and development reinforces the importance of understanding how teachers experience lesson planning, which is the focus of my study.

**Why Teachers Plan Lessons Differently**

One reason why teachers plan lessons differently is because of varying views of teaching and learning. In fact, numerous studies examining how math teachers select tasks and the use of tasks in class have found a direct correlation to teacher perceptions of teaching and learning (Jones & Pepin, 2016). According to Jones and Pepin (2016), typically task design is the work of curriculum developers like textbook writers, while teachers implement tasks in classroom discussion. In effect, these perceptions influence the degree of learning opportunities for students (Jones & Pepin, 2016). This contradicts the three different levels of teacher approaches to curriculum previously described by Shawer (2010). These interpretations differ based on the writers’ perspectives and perhaps on the content area of their focus, as Jones and Pepin (2016) focused solely on mathematics and Shawer (2010) focused solely on teachers of English as a foreign language.

**Considerations for Planning Lessons**

Research has continued to reinforce the importance of instructional planning. Instructional plans and lesson plans represent a way to “ensure teachers are systematic about planning what they teach” long-term and short-term (Yell et al., 2008, p. 33). Determining the
focus of lesson plans is similar to planning curriculum because teachers identify objectives first. In fact, one study recommends applying the principles of objective-based unit designs to planning daily lesson plans, which would make the lessons have a specific end in mind (Jones & Vermette, 2009). Beyond learning objectives, there are a variety of decisions teachers have to make when planning and delivering instruction.

Many studies have explored what decisions teachers should consider when planning lessons, including: (1) how to monitor student progress (Yell et al., 2008); (2) authentic learning (Merrienboer et al., 2003); (3) multiculturalism (Fogarty et al., 1982; Van Garderen & Whittaker, 2006); (4) meeting the needs of all learners (Lynch & Warner, 2008); (5) identify the learning goals (Marlow, 2004); (6) multiple learning styles, promoting engagement, allowing students to respond to assignments in multiple ways, teaching to multiple levels of ability, and using ongoing assessment (Lynch & Warner, 2008); and (7) clear information, thoughtful practice, informative feedback, and strong intrinsic or extrinsic motivation (Reigeluth, 1999). These studies will be further examined below because they contribute to the context of this study and point to deficiencies in how teachers consider these decisions when planning lessons.

**Lesson Planning Decision-Making**

Although older, the studies by Fogarty and colleagues (1982) and Kremer (1981) have been forerunners in research on teacher decision-making when planning lessons. They found that novice teachers are less able than experienced teachers to consider input from students during instruction to modify instruction but are rather more focused on responding to student behavior that could disrupt their planned activities (Fogarty et al., 1982). They also concluded that teachers need to be able to make decisions on how to modify instruction during instruction as it is not possible to predict student response (Fogarty et al., 1982). “Strategies for effective
achievement of instructional goals cannot be exactly preplanned, because the strategy selected depends on the nature of environmental cues, particularly student performance cues that arise during the instructional process” (Fogarty et al., 1982, p. 14). These findings provide insight into the importance of decision making and convey that teachers develop their decision-making skills with time and experience. The findings of Fogarty and colleagues (1982) also demonstrate how teachers must consider past experiences of student responses to instruction when planning lessons and what possible student responses will be during instruction, as well as how to respond to them. The challenge many teachers face in modifying instruction to meet student needs is the inability to identify those needs (Ediger, 2004).

Analyzing how teachers plan instruction is difficult due to it being a “covert, tacit” process (Kremer, 1981, p. 21). This difficulty has led to little research being focused on this process (Kremer, 1981). A study exploring teachers’ lesson planning process found that student teachers were more dogmatic, being more structured and bound to preconceived objectives, whereas veteran teachers were less dogmatic, being more flexible and planning instruction based on student needs (Kremer, 1981, p. 24). Similarly, the study also found that student teachers were more task-oriented, while veteran teachers were more person-oriented (Kremer, 1981). In Kremer’s review of literature (1981), she confirmed that previous studies revealed that teachers focused mainly on planning activities, instead of focusing on learning objectives as they are taught to do.

**Current Trends in Lesson Planning**

More recent research has emphasized the need to differentiate instruction, which refers to differing instruction based on student need or ability levels. Based on literature about differentiating instruction, the conclusion can be made that teachers are more effective and are
more willing to try new teaching strategies if they use differentiation techniques because they are better able to meet the specific needs of their students (Lynch & Warner, 2008). Van Garderen and Whittaker (2006) recommend *universal design*, which is a lesson planning approach that calls for differentiating instruction by considering the needs of students before planning instruction. The key concepts to be considered for planning differentiated instruction include content, process, product, affect (i.e., student linking of thought and feeling in the classroom), and learning environment (Van Garderen & Whittaker, 2006, p. 14). However, to differentiate, these must be considered during the planning stages of a lesson because teachers are unable to anticipate when students may not be engaged and could result in disruptive behavior (Lynch & Warner, 2008).

To plan lessons with differentiation in terms of multiculturalism, Van Garderen and Whittaker (2006) recommended considering content integration, knowledge construction process, equity pedagogy, prejudice reduction, and empowering school culture and social structure (p. 16). Differentiating with multicultural education is planning instruction with the considerations listed above to meet the different needs of students based on their cultural identity (Van Garderen & Whittaker, 2006). The goal of multicultural education is to enable students to have the skills and knowledge to succeed in a diverse world (Van Garderen & Whittaker, 2006). Although textbooks are attempting to diversify content, it is the responsibility of the teacher to use supplemental materials to ensure alternative perspectives and voices are presented in class (Van Garderen & Whittaker, 2006).

An important component of engaging students is the use of motivation. Keller (2000) stated that student motivation has historically been an important consideration for educators but they have lacked methods for systematically predicting and influencing motivation. Keller
(2000) developed the ARCS model, which is based on motivational concepts and includes the following four categories: attention (A), relevance (R), confidence (C), and satisfaction (S). The ARCS model resulted from reviews and integration of research literature as well as successful practices (Keller, 2000). These categories include conditions needed to motivate students and allow teachers to consider these specific motivations when planning lessons (Keller, 2000). Similarly, researchers recommend that student needs and interests be considered when planning instruction as part of an inquiry-based approach, where students learn through open inquiry of content such as mathematics (Linder, 2010).

Each additional element that contributes to effective teacher instruction, such as differentiating or motivation, is recommended to be considered as part of the planning process. Another observation is that as the standards for content areas are updated, such as with the Next Generation Science Standards (NGSS), teachers may need to make additional considerations when planning instruction. Krajcik and colleagues (2014) created a 10-step process for developing lessons to meet the performance expectations as detailed in the NGSS that is similar to the previous steps recommended by Kemp and colleagues (1998), but with the addition of identifying related math and literacy standards. Therefore, it can be inferred that the process of lesson planning is becoming more complex, due to the additional requirements of meeting a variety of student needs and new content area standards.

**Cognitive Load Theory**

The increasingly complex demands of planning instruction are counter to the simplicity in lesson planning recommended by proponents of cognitive load theory and instructional design. Having been around since the 1980s, cognitive load theory provides a framework for investigating cognitive process and designing instruction (Paas et al., 2003). Paas and colleagues
(2003) suggested that many instructional strategies impose extraneous cognitive demands by providing more elements than are necessary. Based on their understanding of cognitive load theory, they recommended that teachers simplify instruction by removing superfluous information (Paas et al., 2003). They explained how simpler tasks require understanding single elements that do not interact with others, whereas complex tasks require understanding how several elements interact with each other in different ways. Additionally, teachers often complicate simpler tasks by providing unnecessary information or directions (Paas et al., 2003).

Merrienboer and colleagues (2003) proposed a model consistent with cognitive load theory, emphasizing the idea that authentic learning tasks are difficult to implement because of their complexity. They suggested providing simple tasks first and then avoiding unnecessary information during instructions by providing “just-in-time information” when needed (Merrienboer et al., 2003, p. 6). Furthermore, instructional design theory holds that instruction should include clear information, thoughtful practice, informative feedback, and strong intrinsic or extrinsic motivation (Reigeluth, 1999). Teachers are therefore faced with the difficult task of balancing how to meet the wide variety of student needs while maintaining simple and clear instruction.

**Teacher Preparatory Training in Planning Lessons**

Tasked with planning lessons that meet the various needs of students is especially challenging for inexperienced teachers who receive training that is inadequate (Skowron, 2001). According to John (2006), inexperienced teachers “describe their planning as time-consuming as they struggle to make sense out of the cornucopia of decisions they have to make regarding content, management, time, pacing, and resources” (p. 489). Experienced teachers, conversely, tend to have a very general plan “leaving detailed decision-making to the period prior to starting
the lesson or to various points in the lesson itself” (John, 2006, p. 489). The predictions that are required to meet student needs as described above for effective instruction are difficult for novice teachers to make (John, 2006). A contributor to this shortcoming of novice teachers is the lack of readiness in developing lessons in their teacher preparation programs.

Teachers should all receive some form of training on developing lesson plans while enrolled in a teacher preparation program at a college or university. In reviewing literature regarding how teacher preparatory students receive training on how to plan lessons, the overarching theme is that teacher preparation programs are ineffective in their approach. Previous research on lesson planning emphasized lesson planning as the product rather than the process (Rusznyak & Walton, 2011). At Rusznyak and Walton’s (2011) university in South Africa, the university’s lesson planning guideline or template focused more on procedures. The university’s lesson planning guidelines required teacher preparatory students to fill in blanks concerning learning outcomes, assessment standards, sequencing of conceptual progressions, common misunderstandings, examples, strategies, and what texts to be used, focusing primarily on procedures. Rusznyak and Walton (2011) added to this template “pedagogical content knowledge” including blending “content knowledge, knowledge of learners and their context and general pedagogical knowledge,” which is essential to meeting the needs of students (p. 272).

The use of fill in the blank templates is a common approach by university teacher preparation programs, as concluded by Skowron’s (2001) review of literature. Skowron (2001) found that planning lessons is a critical part of preparatory coursework and lesson plan templates provide an opportunity for student teachers to discuss and understand lessons. They provide an opportunity to ask questions and make decisions, mainly from a procedural standpoint. However, such models used during preparatory coursework do not meet the needs of experienced teachers.
in terms of complexity. Beginning teachers tend to focus on the most basic form of lesson planning such as defining the learning standard and assessing student learning. Skowron (2001) stated that lesson plans are the “blueprint” of instruction and basic understanding is necessary before moving on to more complex planning such as meeting the needs of a diverse classroom. The author suggests using four major instructional designs: basic, integrated, differentiated, and problem-based. Skowron (2001) also recommended the “Powerful Lesson Planning Models” approach which provides questions and a step-by-step process to develop lessons along with templates and examples.

Shawer (2010) recommends that teachers develop curriculum at the classroom level to address the problem of teachers being unprepared for delivering instruction and to address the need to make curriculum more relevant by meeting student needs. However, teachers have been shown to benefit more when collaborating with others. Ozogul and colleagues (2008) found that teacher preparation students benefited more by receiving feedback from experienced teachers on their lesson plans than they did from feedback received from peers or from self-reflections. Even receiving feedback in an online community from peers was found to be more beneficial in professional growth in developing lessons than no feedback at all (Salajan et al., 2016).

The bottom line is that the literature points to preparation programs being ineffective in preparing teachers to plan lessons. In fact, students finish their preparation programs acknowledging they have deficiencies in this area and are worried about planning lessons once they have their own classroom (Schmidt, 2005). One study found that teacher preparation students have concerns about knowing how to begin planning and have difficulty identifying what children need to learn, acknowledging how many decisions are improvised, understanding
the difference of thinking about teaching compared to actual written plans, and applying planning to in-class experience (Schmidt, 2005).

**The Benefits of Studying Design**

Educational researchers are increasingly using design as a means to develop or test theories (Edelson, 2002). Design, as referred to in educational research, could “include the design of curriculum, software, professional development, school organizations, and school–community collaborations” (p. 106). Therefore, the two main focuses of my study, professional development and lesson planning, both fall under this definition of design. In any design process, designers must make decisions on procedures, problem analysis, and design solutions (Edelson, 2002). That means the knowledge gained is applicable to the design process’s procedures, problem analysis and success in producing a successful design product (Edelson, 2002). Understanding the design of lesson plans, as proposed in my study, also intends to provide greater understanding in the design process procedure, which I have described as teacher cognitive processing. As Edelson’s work sought to test theories, the theories described below will provide a theoretical lens for my proposed study although the purpose of my study is not intended to test these theories.

**Decision-Making Theories**

Although previous research could not be found regarding how professional development is considered during the decision-making process of teachers, there is a “proliferation of research” (Mandinach & Jackson, 2012, p. 24) regarding data-driven decision-making, which has implications on my study. Recent studies on data usage have shifted from focusing on district and school leaders supporting data usage to the new focus of how instructional coaches and teacher leaders fill that role (Rangel et al., 2015). Rangel and colleagues (2015) found that
instructional coaches helped teachers make sense of the data, and their findings point to how school leaders can “leverage the content and pedagogical expertise of coaches to drive instructional improvement, with an eye towards the incorporation of more authentic teaching and assessment, and not just on improved student performance on standardized assessment” (p. 27).

Findings on teacher decision-making using data found that teachers were most receptive to using data when they could apply it to their immediate needs in the classroom (Rangel et al., 2015). This is relevant to my study because it may imply teachers are open to modifying instruction based on professional development learning if it is relevant to meeting their classroom needs. Policymakers are placing faith in the power of data to improve student achievement, but despite the popularity of the terms “data use” and “data-based decision making,” the “policy texts tend to be vague with respect to how data should be used” (Spillane, 2012, p. 113). Spillane’s (2012) study found that school leaders use data to identify areas of improvement with instructional programs and to decide on corrective action; however, Spillane (2012) concluded that the data was used primarily to identify what content to cover, not how to cover it in regard to the instructional strategies to use or their delivery. Likewise, this finding supports the importance of my study, because the examination of how teachers decide on strategies in their lesson plans can provide insight into how teacher decisions can be made in response to data analysis.

**Attribution and Sensemaking Theories**

There are two main theories used to understand how teachers make sense of data, including *attribution theory*, which states that individual’s perceptions of the causes of outcomes motivate action, and *sensemaking theory*, which states that individuals create meaning to their own experiences to construct their reality (Bertrand & Marsh, 2015). The perceived causes of
student outcomes, or attributions, influence the sensemaking process of teachers when they
generalize these attributions. For example, when analyzing the causes of student outcomes
observed in data, teachers most often accept that their own instruction is responsible for the
outcomes, but also frequently focused on student characteristics such as demographics or home
environment (Bertrand & Marsh, 2015). The focus on these characteristics prevented teachers to
reflect on their own instruction and reinforced “low expectations for English language learners
and students in special education” (Bertrand & Marsh, 2015, p. 866). Therefore, sensemaking
includes both turning data into understanding, but also attribution (Bertrand & Marsh, 2015).

Attribution theory includes three characteristics to consider: (1) whether the cause is
internal or external, (2) of whether the change is enduring or transitory, and (3) whether the
cause is controllable (Bertrand & Marsh, 2015). Teachers’ interpretations are dependent on their
perspective, as they are more likely to want to make changes to their instruction if they believe
the cause is controllable, but less likely to be motivated to change if the cause is enduring, such
as student demographics (Bertrand & Marsh, 2015). This provides insight to my study because
teachers may be more motivated to apply learning from professional development depending on
their perspective or belief regarding the professional development’s content, and whether it is
relevant to what they can control, as posited in attribution theory.

Sensemaking theory may also provide insight into my study, as teachers will use previous
experience to make sense of causal relationships (Bertrand & Marsh, 2015) or, in other words,
will use previous experience to understand how to apply content from professional development
into their lesson planning. In combining sensemaking and attribution theory, we can have a
starting point to how teachers may interpret content learned from professional development
because previous studies have explored how these theories explore how teachers make sense of data.

Finally, attribution theory also connects to previous research on how teacher attitudes impact the effectiveness of professional development. “Expectations for students, as beliefs, may shape attributions, which in turn may influence future expectations” (Bertrand & Marsh, 2015, p. 868). In the same way, previous research on professional development has found that teacher attitude toward professional development determines the teachers’ receptiveness (Jackson & Bruegmann, 2009).

**Sociocultural Learning Theory**

Similar to sensemaking and attribution theories is the sociocultural learning theory. In a paper describing a framework on how to build teacher capacity to understand student data, Marsh and Farrell (2015) draw on *sociocultural learning theory*, which states that “learning is inherently a social phenomenon where individuals make sense of information and construct new knowledge based on prior knowledge, beliefs, attitudes, and experiences, and through activity and social interactions in everyday contexts.” Sociocultural learning theory assumes that learning is accomplished within social events requiring an understanding of how individuals participate in those learning activities with their peers (Marsh & Farrell, 2015). This is appropriate to consider for my study on professional development as learning through professional development in a school setting is typically completed in a group setting (Buysse et al., 2009). In Marsh and Farrell’s (2015) review of sociocultural learning theory studies, they found that it is an area of study that is undeveloped, and they confirmed the reciprocal relationship between the training provider and learner. Sociocultural learning theory is commonly used along with sensemaking theory in studies on teachers using data in decision-making (Marsh & Farrell, 2015). These
theories provide a basis of an interpretative lens for my study, suggesting how teachers make sense of data, which can be applied to understanding in my study how teachers make sense of professional development.

**Adult Learning Theory**

Previously established theories in adult learning can provide insight into how teachers learn in professional development. Although there is no single theory explaining all that is known about adult learners, Merriam (2008) suggested that since the beginning of adult education as a professional field of practice began in the 1920s, the two important pieces to the current understanding of adult learning are andragogy and self-directed learning. Moreover, the “spotlight” of adult learning research has shifted from focusing on the individual learner to the learner in context (Merriam, 2008). Previous research focused on the cognitive process of taking in information, converting the information to actionable knowledge, and translating the knowledge to a change in behavior (Merriam, 2008). Learning is now constructed “as a much broader activity involving the body, the emotions, and the spirit as well as the mind” within a broader context, such as the workplace (Merriam, 2008, p. 94).

*Andragogy* views the adult learner as being self-directed, having learning informed by life experiences, learning driven by changing social roles, being motivated by the relevance of information, and being intrinsically motivated (Merriam, 2001). The *self-directed learning* philosophy has as its goal that adult learners should be developed to be self-directed and proactive in being responsible for their own learning (Merriam, 2001). Andragogy and self-directed learning theories of adult learning inform my current study by underlining the importance of understanding context and teachers’ thoughts and feelings regarding professional development. The contexts of the school’s culture and of the teachers’ own beliefs are
conceptualized within the adult learning theories of andragogy and self-directed learning has having vital importance to learning, and therefore, applying professional development to lesson planning. Focusing on teachers within one school will provide a great understanding, as Merriam (2008) stated that the “linking of the individual’s learning process to his or her context makes for a richer, more holistic understanding of learning in adulthood” (p. 95)

**Transformative Learning Theory**

Another adult learning theory that may provide insight into how teachers learn from professional development is transformative learning theory. Dirkx (1998) explains how the majority of adult education in North America is guided by an instrumental approach, in which learners gather knowledge or skills needed to meet a specific need or adaptation. *Transformative learning* proposes learners to be active in the learning process, rather than passive as in the instrumental view. In transformative learning, adults make sense of the learning of knowledge and skills through the context of their lives and circumstances (Dirkx, 1998). Transformative learning theory holds that “the meaning of what one learns rests with the accuracy with which one internalizes and represents this knowledge within one’s own cognitive schemes (Dirkx, 1998, p. 2). Knowledge, therefore, is not something “out there” to be passively consumed by the learner, but rather is made sense through the application of daily experiences (Dirkx, 1998). Similar to sensemaking theory, transformative learning theory holds that learning has to have personal significance to be considered meaningful (Dirkx, 1998). In my study, transformative and sensemaking theories provide a lens to understand how teachers make sense of learning from professional development and how they apply that learning to the classroom.
Chapter II Conclusion and Summary

This literature review demonstrated the importance and relevance of this study by reviewing the previous research on professional development, lesson planning, and adult learning theories. In reviewing these previous studies, I explained how this study provides needed insights to build upon previous knowledge in professional development, lesson planning, and adult learning. Many of the studies discussed in this literature review identified what characteristics of professional development were effective in improving student achievement or in changing teacher practices. Previous studies on lesson planning explored the considerations that teachers need to make in reaching all students but lacked a connection in understanding the cognitive process of teachers when attempting to process how to apply these new considerations into daily practice. These are all areas in which this study provides insight.

Adult learning theories reinforced findings from professional development research such as the motivation of adults to learn when content is relevant to their daily practice and how adults make meaning of learning based on their experience. The previous research on adult learning reinforced the significance of this study beyond the realms of education and the possible benefits its findings may offer other fields of study. Chapter III explains the details of how this instrumental case study was conducted and how the data was analyzed.
CHAPTER III
METHODS

Planning instruction is the cornerstone of teaching, as lesson plans reflect teachers’ “philosophy, student population, textbooks, and most importantly, our goals for our students” (Jensen, 1991, p. 403). Research exploring the cognitive processes of teachers during planning dares to approach the complex world of psychology. This type of research requires a method that will enable it to investigate not only the intricate world of the planning experience, but specifically the instructional planning process after teacher participation in professional development that aligns with research supported characteristics of effectiveness. Based on the purpose of this study, a qualitative design is the most appropriate for such an exploration. The key idea of a qualitative approach is to provide meaning and requires the researcher to balance inductive and deductive analysis in “discovering patterns, themes, and categories in one’s data” (Marshall & Rossman, 2011, p. 222). Indeed, the purpose of this study is to contribute to the existing research on both fields of planning instruction and professional development by conducting a case study that can facilitate an in-depth investigation of the cognitive process of lesson planning after participating in instructional coaching.

This chapter elaborates on the methodology used for this study. This includes more details into why a qualitative methodology and an instrumental case study approach is the most appropriate for the study’s purpose. I also elaborate on the study’s population and data collection protocols along with the data analysis procedures. Finally, the chapter additionally includes an explanation of how I ensured trustworthiness and a description of limitations and delimitations.
Research Design, Approach, and Rationale

To adequately answer the research questions stated in Chapter I, most importantly how teachers experience planning instruction after participating in professional development, I utilized an instrumental qualitative case study methodology. According to Creswell (2013), case studies develop in-depth descriptions and analysis of a case, which is precisely what is necessary to extensively explore instructional planning after experiencing professional development in a limited context with a purposeful and intentional sampling. The focus of this study, the experience of lesson planning, is specific to the context of the participating teachers, professional development. Therefore, a case study is appropriate as according to Stake’s (1995) definition, along with the focus of a single case’s complexity, that researchers in case studies come to “understand its activity within important circumstances” (p. xi).

According to Stake (1995), instrumental case studies are intended to accomplish “something other than understanding” (p. 3). In this study, the case is School A, which is a school in west Michigan, further described below, with the purpose to gain understanding on the lesson planning process and how teachers consider knowledge learned from professional development during the lesson planning process. To understand teachers’ decision-making during the lesson planning processes, the study must be in-depth, include a description of the specific process of the participants’ experience lesson planning, and use multiple data sources over a period of time, which are all characteristics that define case studies (Creswell, 2013, 2014).

Instrumental case studies investigate and analyze specific cases to improve understanding that may be applicable to other cases (Stake, 1995). The teachers of this study served as a case illustrating a larger phenomenon that all teachers experience, although this study will be limited
in terms of the number of teachers participating, the size, type, and geographical location of the school, and by the fact they will all be elementary teachers. Although limited in scope, the investigation of the specific case included in this study provided understanding that could reasonably be applicable to many teachers’ decision-making process on lesson plans after participating in professional development.

Case studies consist of “a variety of data collection procedures” (Creswell, 2014, p. 14), which is essential in this study to provide insight into the complex experience of teachers’ planning instruction. Data collection within the current research design, which is described in depth later in this chapter, includes document analysis, face-to-face interviews, and observation of instructional coaching sessions, along with the analysis of this data to identify themes. Case studies also gather data from multiple perspectives when possible. In this study, the teachers participating in the study provide one perspective and the instructional coach who delivers the professional development to them provides another perspective.

**Population, Sample, and Setting**

Instructional planning and professional development may be found in schools throughout the nation. However, identifying schools that adhere to the characteristics of effective professional development, as commonly accepted by researchers in that field, is not as easily found. For this reason, a list of potential participatory schools to be considered for the study was generated using a list of schools using the instructional coaching model, developed by a team of researchers for the Michigan Association of Intermediate Service Agencies (MAISA) General Education Leadership Network (GELN) Literacy Task Force, as described in Chapter II. By limiting potential schools to those utilizing the specific instructional coaching model developed by the Literacy Task Force, it increased the chance that the professional development teachers
receive is focused on raising student achievement. Additionally, selecting a case where the instructional coach receives ongoing training, support, peer engagement, and supervision on the GELN Literacy Instructional Coaching model further contributed to securing participation from teachers and coaches who were working under a well-vetted and consistent coaching program grounded in research-supported literacy and literacy coaching practices.

I limited my recruitment of participants to schools in southwest Michigan to those schools that provide sustained literacy instructional coaching professional development through a trained and experienced literacy coach. This increased the likelihood that I could recruit participation from teachers and a coach in a school that would serve as an instrumental case (Stake, 1995), wherein recruited participants for this study could be assumed to be receiving high quality professional development through instructional coaching. The school that became the instrumental case for this study through my recruitment process has made a commitment to participating in the literacy coaching provided by the intermediate school district (ISD) with which the school district affiliates. The district has an arrangement with their ISD to provide literacy-focused instructional coaching to their teachers as part of the district’s commitment to student literacy success. The participating school, therefore, is focused on improving instruction which is tightly connected to lesson plan.

The instructional coaches who support the case schools in my recruitment pool are employees of their county or regional Intermediate School Districts in west Michigan. To start the recruitment process, I emailed my recruitment letter to all the ISD literacy instructional coaches (Appendix B). The recruitment letters to instructional coaches provided a description of the study and an invitation to respond if the coach was interested in participating. To be considered for the study, qualified coaches also needed to indicate that they were willing to
forward the teacher recruitment email to the teachers with whom they were currently working. The recruitment plan required both the coach and three to five teachers in a specific elementary school participating in the literacy coaching program to respond with interest and consent to participate.

Through the process of, first, identifying qualified literacy coaches who would consent to participate, then, identifying three to five teachers willing to participate from a school that coach serves, I was able to identify a potential instrumental case study school. To confirm that school’s participation, I notified the district superintendent by emailing him the Superintendent Recruitment letter (Appendix A), asking for permission for the interested staff to participate.

Snowball sampling of teacher participants through a willing literacy coach participant, identified the first teacher participant. As soon as the first teacher participant confirmed interest, I secured the superintendent’s permission to proceed with recruitment. Through the snowball sampling, the first teacher participant encouraged two more staff colleagues, who also participated voluntarily with the literacy coaching process. The recruitment ended with one instructional coach and three teachers since they were the only teachers in that school participating in the coaching program at that time. Snowball sampling is commonly used in qualitative research and is when a study’s sample is yielded “through referrals made among people who share or know of others who possess some characteristics that are of research interest” (Biernacki & Waldorf, 1981, p. 141). This allowed me to meet the intended goal of having at least three teachers within the same school building participate in the study.

The design of my study necessitated that all three teachers come from the same building, undergo the same professional development training, and receive the same supports through a coach trained and experienced in the GELN coaching model. By using three different teachers
within the same building, I was able to analyze the experiences of these teachers within a specific context and to have a greater understanding of how each teacher responds to the literacy instructional coaching provided by the same coach in the same school context. Instrumental case studies require understanding of the specific case. In this study, the case is a particular school with contextual characteristics that need to be understood. I provide a deeper description of the school in Chapter IV, as it was through the process of engaging with the study participants, that I came to know important characteristics of the school that help inform transferability of my study findings.

According to Creswell (2013), case studies allow researchers to use “multiple and different sources, methods, investigators, and theories to provide corroborating evidence” from different sources to shed light on a theme or perspective (p. 251). The three teachers and their instructional coach who participated in this study provided varied perspectives. Collecting data through three different engagements with the teachers and their coach provided the multiple data sources desired for case studies, allowing me to understand the interactions between teachers’ coaching experiences and their lesson planning process well.

Stake (1995) said that the “real business of case study is particularization” and that researchers are to “take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does” (p. 8). For this study, the particular case is the context of professional development through instructional coaching of one school, School A. Each school context presents a specific environment for instructional coaching. My goal was to find a case school where instructional coaching is a form of professional development for all teachers. Another perspective was provided by interviewing the instructional coach who facilitated the professional development that the teachers participated in. The perspective by the
instructional coach provided a richer understanding of the professional development that was provided and the application of it when the teachers planned lessons. I had originally planned on conducting a drawing to randomly select three to five teachers from a pool of teachers and coaches who expressed interest in participating in the study. This was not necessary, however, since the recruitment process for this case school resulted in only three teachers and one coach who were willing to participate. I decided to proceed with this sample and case as the teachers and coaches who responded were very willing participants. As I began to engage with them, I also learned that they were the only three teachers in the case study school who were voluntarily participating with the instructional coach. I determined that this willingness to participate in coaching and this study made them particularly interesting as the sample for this study. I also understood that as volunteers for receiving instructional coaching in a case study school where this participation is optional and where actual participation in coaching was limited to my sample would pose certain limitations on my study.

The purpose of an instrumental case study approach generally is to improve understanding of broader issues, in this case, the process of decision-making in lesson planning after participating in coaching-based professional development through the analysis and investigation of a specific case (Stake, 1995). The purpose of this instrumental case study specifically is to know the lesson planning process well within a specific group of teachers within the context of one school building. This is significant as context and interactions with peers contribute to adult learning, as well as the creation and application of meaning through that learning, as discussed earlier in this chapter (Marsh & Farrell, 2015).

When seeking teacher participants, I also applied exclusionary criteria that would eliminate a teacher from participating if that teacher was on a performance improvement plan.
of assistance to prevent causing additional work or strain on them. Additionally, teachers who
volunteer to participate had to agree to be present at all professional development offered by the
school for their specific grade level, along with regularly attending sessions with an instructional
coach. The three teachers who consented to participate in this study all met the inclusionary
criteria and none were excluded.

Permissions

Before beginning the study, I completed the required process to be approved by Western
Michigan University’s Human Subjects Institutional Review Board, providing information about
protecting human subjects and a sample consent form to qualify prospective participants for the
study (Creswell, 2013). I received HSIRB approval on November 9, 2020. On November 10, I
began calling and emailing recruitment letters to instructional coaches who worked for
intermediated school districts throughout west Michigan. On December 8, I received notice from
an instructional coach that she was interested as well as one of her teachers. I received
permission from School A’s superintendent on December 11. Data collection began January 8,
2021. After the recruitment of the first teacher, the snowball method was used to recruit the other
two teachers at School A who also participate in instructional coaching. All three teachers and
the instructional coach emailed me signed consent forms before the data collection began.

Data Collection Methods, Procedures, and Instrumentation

Forms of Data

Data for this study was collected through two interviews with teacher participants, an
initial interview (Appendix D), and a cognitive interview (Appendix E), as well as an
observation of an instructional coaching session followed by clarification questions that were
completed within 1 week of each other. The interviews were open-ended, semi-structured face-
to-face with the study participants (Creswell, 2013), with a projected time of 60 minutes and actual times ranging from 35 to 60 minutes. In addition, I conducted an interview with the three teachers’ instructional coach focusing on her work with the teachers. In-depth interviews are essential in this study to “identify what’s happening in key episodes and testimonies” (Stakes, 1993, p. 40). By interviewing three teachers within the shared context of the same school building, along with the instructional coach, a rich description of shared phenomena was gathered.

**Cognitive Interviewing**

A cognitive interview approach was used as the second interview to explore teachers’ cognitive experience of lesson planning. To conduct the cognitive interview, I adapted the strategies typically used for a cognitive interview process. Traditionally, cognitive interviewing is used to gain understanding of how respondents answer survey questions while those respondents are in the process of interacting with the survey questions (Beatty & Willis, 2007). During this process, the researcher conducts a small number of one-on-one interviews with the interviewee as they complete a survey. The researcher asks them to “think aloud” as they complete the survey, rephrasing questions in their own words and indicating their cognitive processing in answering questions (Sofaer, 1999). I adapted this form of cognitive interviewing for this specific study due to the purpose of exploring teachers’ cognitive process when planning lessons.

Researchers who use cognitive interviewing value it because it reinforces “the notion that qualitative methods are excellent at helping us understand how people perceive and interpret language and their own experiences” (Sofaer, 1999, p. 1102). Beatty and Willis (2007) stated that the material gathered from cognitive interviewing could include: “(1) respondent
elaborations regarding how they constructed their answers, (2) explanations of what they interpret the questions to mean, (3) reports of any difficulties they had answering, or (4) anything else that sheds light on the broader circumstances that their answers were based upon” (p. 288). Adapting this form of cognitive interviewing allowed me to engage with teachers as they were making decisions about planning instruction. This approach allowed me to explore how the teacher participants interpret the requirements of what to include in their lessons, what difficulties they have in planning, how they consider what they recently learned during instruction coaching, and any other considerations. The interviews were semi-structured, with prompts based on the intended material to explore mentioned above. The interviews also included follow-up questions based on the teachers’ answers.

**Analysis of Lesson Plans**

Participants were asked to submit two lesson plans to illustrate the results of their lesson planning. The proposal for this study intended to use Appendix F to analyze these documents, evaluating them for data based on the study’s research questions. However, when participants were asked for written plans, they shared that they did not write their lessons down. All three teachers said that they relied on their memory to remember what lessons they had conducted in the past. It also was not a requirement by School A’s administration for teachers to submit lesson plans. Teachers did show me examples of worksheets and student assignments, and these confirmed that they implemented practices that were previously discussed during instructional coaching sessions, but these did not play a key role in data analysis. Also, teacher participants wrote down their lesson planning ideas as they explained them during the cognitive interviews, but these did not provide additional data as they simply reflected what they teachers had said
during the interview. These lesson planning notes were photographed by me to serve for clarification purposes during transcription.

**Data Collection Protocols and Procedures**

As stated above, the data for this study was collected through a series of interviews and the observation of instructional coaching sessions for each participant. I began data collection as soon as I received the signed participant consent forms for the instructional coach and first teacher while waiting for the recruitment and consent process to be completed for the remaining two teacher participants. I emailed the teacher to schedule the first interview and requested she pass on my recruitment request to other teachers in her school who work with the instructional coach. She did that and I was able to recruit and obtain consent from two additional teacher participants through this snowball recruiting approach. Subsequently, I coordinated meeting times for the initial interview with the additional two teacher participants. At the end the initial interview for each teacher participant, we scheduled the time to observe their instructional coaching session. The instructional coach interview took place after the instructional coaching sessions. At the end of the instructional coaching sessions, we scheduled the time to conduct the cognitive interview.

All interviews were face-to-face and followed social distancing guidelines due to COVID-19 safety protocols. Initial interviews were held in the teachers’ classrooms to allow privacy and access to their resources. The instructional coaching sessions and cognitive interviews with teacher participants took place in School A’s Title I resource room, where the instructional coaching sessions typically take place. The interview with the instructional coach took place after her instructional coaching sessions with the teachers. The instructional coaching session observations and the final cognitive interviews took place within 15 days of the initial
interview, allowing me to see the immediate application of what was learned during the instructional coaching session to the teachers’ lesson planning. When scheduling interviews and observations, I asked participants to plan for 60 minutes each time, although the time of actual interviews and observations varied between 35 and 60 minutes. I audio-recorded all interviews and the coaching session and took field notes as observing the coaching session. I transcribed the audio recordings to Microsoft Word documents and used pseudonyms to identify the transcripts; thus, preserving participant confidentiality. The transcribed interviews and observations were emailed to the participating teachers and instructional coach to allow the opportunity for them to clarify meaning through member checking. Included in this email was a message to thank participants for their time and an explanation that I may contact them again with additional questions as I continued to analyze the data.

**Confidentiality of Data**

To ensure confidentiality of data I kept all written records of data collected in a locked filing cabinet, including notes of interviews, documents that participants submitted, and signed participants consent forms. I also kept a flash drive containing backups of all electronic files including email correspondences and interview transcriptions in the locked filing cabinet. All of the electronic files and communications were stored on a password protected computer. All transcriptions and notes used pseudonyms to prevent compromising the material’s confidentiality. Once the study is completed, all data and physical documents will be kept at the Western Michigan University archive for 5 years and will be destroyed after that.
Data Analysis

Organization

The data was classified by participant and the data from each interview was considered separately for analysis. I attempted to analyze interviews in the order in which they were conducted so that information was synthesized in a consistent manner.

Method

The method for analyzing the data gathered from interviews was qualitative coding, which is the process of classifying the data into small categories of information (Creswell, 2013) and assigning symbolically a “summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldana, 2013). Coding was done immediately following the transcription of each interview and document analysis individually using in vivo codes, which are codes that “emerge from the actual data as they are collected” (Marshall & Rossman, 2011) and fall under Saldana’s (2013) elemental method of first cycle coding. This approach is appropriate as in vivo coding is useful as “a method of attuning yourself to participate language, perspectives, and worldviews” (Saldana, 2013, p. 48) and the purpose of understanding the process of teachers’ lesson planning after participating in professional development necessitates the need to understand their language and perspective regarding this process. A priori codes were not used and all codes emerged from the interviews. As I analyzed transcripts and documents, I identified keywords or phrases, including “impacting nouns, action-oriented verbs, evocative word choices, clever or ironic phrases, similes, and metaphors” (Saldana, 2013, p. 75). After coding each piece of data, I extracted the emergent codes and began to sort them into various categories (Foss & Waters, 2016).
After completing the final interviews, I revisited all interviews and documents for second cycle coding, using the pattern coding method (Saldana, 2013) to continue sorting codes into categories until they began to form patterns of meaning. Pattern codes are explanatory and identify emergent themes in meaningful groups (Saldana, 2013). This required grouping and regrouping and eventually condensing some groupings to reveal emergent themes that were most salient to my research questions. To conclude second cycle coding, I refined the naming of emergent themes until they captured the essence of participants’ experiences. Themes are what emerge when several codes fit into a common idea (Creswell, 2013), with the goal of reducing the “information down into five or seven ‘families,’ …reducing them to a small, manageable set of themes” (Creswell, 2013, p. 186).

Trustworthiness

Qualitative research must establish trustworthiness to provide value to the study’s findings (Lincoln & Guba, 1986). Lincoln and Guba (1985) suggested that there are four objectives that must be accomplished for a researcher to establish trustworthiness. These objectives include credibility, transferability, dependability, and confirmability. Credibility is the demonstration of confidence in the accuracy of the study’s findings. To address this, I utilized member-checking, which Lincoln and Guba (1985) recommended as a “crucial technique” (p. 314). During the interviews with participants, I asked follow-up questions to seek clarification or prompting participants to expand on their responses. After completing interviews and instructional coaching sessions, I transcribed them within 24 hours and emailed the transcriptions to participants to review for accuracy. The only clarifications that participants provided were corrections of the names of instructional resource books that they had referred to and correcting the spelling of the authors’ names for those books. As described by Creswell (2014), “this
procedure can involve conducting a follow-up interview with participants in the study and providing an opportunity for them to comment on the findings.” Checking for accuracy through email correspondence served as “informal testing of information by soliciting reactions of respondents,” which is a component of Lincoln and Guba’s (1986) description of member checking.

Another technique that was used to address credibility was triangulation. Data triangulation is seeking multiple sources of information within the same phenomenon, which in this study is the teachers’ experience of planning instruction (Marshall & Rossman, 2011, p. 262). Marshall and Rossman suggested collecting data through other methods to triangulate interview data (2011). As Bowen (2009) noted, “The qualitative researcher is expected to draw upon multiple (at least two) sources of evidence in case studies; that is, to seek convergence and corroborations through the use of different data sources and methods” (p. 28). In my study, multiple methods provided greater insight into the decision-making processes of the teacher participants and their considerations of applying learning from the instructional coaching. Triangulation was accomplished by interviewing both the teacher participants and the instructional coach, by observing a coaching session, and by reviewing the documents teachers offered of student work, their handwritten lesson plan notes, and example student worksheets. The interviews with participants provided their reflections on their decision-making process when planning lessons. The interviews also revealed the participants’ self-analysis regarding how the teacher considered what she learned from instructional coaching professional development during the lesson planning process.

The purpose of document review in this study was to gain insight into what cannot be observed (Stake, 1995) and in this case the document review provided evidence that the
information from coaching was synthesized and applied to practice. Bowen (2009) suggested that “The rationale for document analysis lies in its role in methodological and data triangulation, the immense value of documents in case study research, and its usefulness as a stand-alone method for specialized forms of qualitative research.” By examining a variety of data, researchers can reduce the impact of “potential biases” (Bowen, 2009). The interview of the instructional coach also served as a form of triangulation as she provided another perspective on how teachers experience the lesson planning process. A major component of the instructional coaching sessions included questions on what strategies the teacher was planning to use for their next lesson and in what sequence. The questions that the instructional coach used to foster reflection and collaboration can be found in Appendix H.

*Transferability* is the establishment that findings can be applied to other contexts or settings with different participants. This can be accomplished by using thick description, which is describing the behavior and experiences of participants as well as their context to allow a greater understanding by outsiders. The extensive open-ended interviews were used to develop a narrative thick in description. Lincoln and Guba (1986) stated that a narrative thick with descriptive data developed about the context may be applied elsewhere. The goal is to produce data thick enough in description that it may be helpful to educational leaders when planning professional development, teachers looking to improve their lesson planning, colleges intending to improve their teacher preparation programs, and other fields hoping to improve their professional development. When transcribing interviews, I noted when participants laughed or showed hesitation when answering questions. Also, I noted the emotional tone of participants whether they said something with pride or doubt. By including these descriptions, as well as their professional experiences, I was able to provide a thick description.
Confirmability is concerned with establishing that a study’s findings can be confirmed by others and that the findings are not “figments of the inquirer’s imagination, but clearly derived from the data” (Korstjens & Moser, 2018, p. 121). Confirmability can best be ensured by the use of an audit trail (Lincoln & Guba, 1985). The audit trail is defined as “transparently describing the research steps” and keeping a log reflecting on their role in the study (Korstjens & Moser, 2018, p. 121). I kept a journal reflecting on how my personal experience as an administrator impacted my interpretation of facts and how it would be introduced into the study, which allowed me to avoid bias (Creswell, 2014, p. 83). I accomplished this by journaling during the transcription process, highlighting quotes from the study’s participants, and recording my reflections in the comment function of the Google Document. This allowed me to be aware of biases, interests, and areas that I need to ask clarifying questions on during the next interview session. During data analysis, I kept a code book that captured and preserved each stage of the analysis process to ensure that my analysis process would stand up under an audit of the coding, categorization, and crystallization process.

Dependability demonstrates that a study’s findings can be repeated. For this trustworthiness approach, Lincoln and Guba (1985) recommended using an inquiry audit where an individual not associated with the study evaluates the data collection and analysis process. This was completed by my university advisor and doctoral dissertation committee chair. I told the study’s participants that depending on input from my university advisor, I may need to contact them for additional information. However, my advisor confirmed the data collection process and analysis, stating that further research was not necessary.
Delimitations

The delimitations for this study are numerous, which is the natural consequence of a study’s design (Marshall & Rossman, 2016). This section introduces the delimitations, while in Chapter V, I elaborate on the limitations of the study connected to recommendations for future research. The limited number of participants in this study was intentional, in that the point of this case study was to identify specific experiences and better understand them (Stake, 1995) rather than attempting to understand the experience of every teacher planning lessons after experiencing professional development. Or in other words, “One chooses a qualitative approach to understand phenomena from the participants’ perspectives and to explore and discover, in-depth and in context” (Marshall & Rossman, 2011, p. 85).

Another delimitation was that of setting, as this study only included those who participated in professional development within the context of one school building. A final delimitation of this study is that it was not designed to examine how teachers solve challenges they experience when planning lessons and participating in professional development. Its purpose was to understand the experiences of teachers during the lesson planning process after they have undergone professional development.

Chapter III Summary

Chapter III explored how a qualitative methodology was utilized for this instrumental case study to explore the process of lesson planning after teachers participate in the professional development activity of instructional coaching. The case study included the participation of three teachers and an instructional coach within a single elementary school in west Michigan. The data collected included teacher interviews, observations of teachers participating in an instructional coaching session with their instructional coach, and an interview with the instructional coach.
Data analysis followed a first and second cycle coding process using in vivo codes for emergent salient points and pattern coding to crystallize salient points into a set of themes that capture the essence of what was learned pertaining to the research purpose and questions. The coding process was guided by Saldana’s (2013) elemental and pattern coding methods.

Chapter IV presents the data findings from the interviews and observations. Chapter V offers conclusions based on data and recommendations for further research.
CHAPTER IV
FINDINGS

As discussed in Chapter I, the purpose of this instrumental qualitative case study was to examine teachers’ experiences with the lesson planning process after participating in instructional coaching. In order to accomplish this, I utilized an instrumental qualitative case study methodology, which investigated and analyzed specific cases to improve understanding that may be applicable to other cases (Stake, 1995). The case used in this study was of three elementary teachers who work in the same west Michigan school building, School A, and one instructional coach who provided them with professional development through regular instructional coaching sessions. This chapter details the findings of my study.

Individual interviews were conducted with the three participating teachers, followed by an observation of an individual coaching session with their instructional coach and a cognitive interview as they performed the task of lesson planning. The instructional coach was also interviewed to better understand her approach to delivering instructional coaching, as well as how she adapted her approach for each of the three teachers. The names of the teachers, instructional coaches, and school district are pseudonyms of my creation and have significance to me so I could more easily remember them without compromising their anonymity.

This chapter discusses the findings and conclusions of my study and is organized into three sections. The first section describes the setting and characteristics of the participants based on data collected from the initial interviews and the themes based on this data. The second section examines the teachers’ experiences with the lesson planning process, examining the themes that emerged in relation to the research questions. The third section summarizes these findings.
Setting

This study took place in a K-5 elementary school building in west Michigan with 12 teachers. The school will be referred to as School A to protect the participants anonymity. School A is a rural school with an enrollment of 246 students, with 62.2% being working class or poor and 13% minority population. Each grade level in School A consists of two teachers, with one teacher having a split classroom consisting of both 3rd and 4th grade students.

Table 1
School A Demographics

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>School Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building organization</td>
<td>• Elementary building: K-5th grade</td>
</tr>
<tr>
<td></td>
<td>• Middle and high school building: 6th-12th grade</td>
</tr>
<tr>
<td>Enrollment</td>
<td>• 246 students</td>
</tr>
<tr>
<td>Population of the community</td>
<td>• 3,586</td>
</tr>
<tr>
<td>Economically disadvantaged</td>
<td>• 62.2%</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>• American Indian or Alaska Native: 3.6%</td>
</tr>
<tr>
<td></td>
<td>• African American: .76%</td>
</tr>
<tr>
<td></td>
<td>• Hispanic/Latino: 2.27%</td>
</tr>
<tr>
<td></td>
<td>• Native Hawaiian or Other Pacific Islander: .19%</td>
</tr>
<tr>
<td></td>
<td>• Two or more races: 6.63%</td>
</tr>
<tr>
<td></td>
<td>• White: 86.55%</td>
</tr>
<tr>
<td>Percent of students proficient in all subjects on state tests (Michigan Student Test of Educational Progress)</td>
<td>• 38% proficient (state average is 42%)</td>
</tr>
<tr>
<td>Number of teaching staff</td>
<td>• 12</td>
</tr>
<tr>
<td>Ratio of students to instructional staff</td>
<td>• 16:1</td>
</tr>
</tbody>
</table>
The instructional coach for the district was employed by the county’s intermediate school district and is funded by a state grant awarded to intermediate school districts throughout the state. The grant, Section 35a(4) of the FY 21 State School Aid Act, provides $31,500,000 for early literacy coaches to “assist teachers in developing and implementing instructional strategies for pupils in grades pre-K to 3 so that pupils are reading at grade level by the end of grade 3” (Michigan Department of Education, 2021).

School A does not have a purchased curriculum program for Reading or Writing. This lack of a curriculum program has a significant impact on the amount of freedom the participants have in providing instruction based on their personal preferences. Although the participants shared that a purchased curriculum program would be welcomed, they appreciated having the freedom of not having to follow a structured program. One of the teacher participants, Darla, said that she is so accustomed to not having a curriculum program that she would not know what to do if she had one.

While many schools that participate with their ISD literacy coaching services either require or strongly encourage teachers to participate, the principal of School A extends teacher prerogative to participation with the literacy coach assigned to this school. Teachers are completely autonomous in their decision to participate or not participate. Of note, this reliance on teacher initiative to participate in the literacy coaching professional development resulted in only the three teachers who participated in this study receiving the coaching services. As discussed in the next section, the three teacher participants for this study believe that they are different from their colleagues in the school in terms of disposition and readiness to pursue personal growth. The lack of pressure from the principal to participate in the literacy coaching results in these
three teachers who do participate in coaching expressing the belief that they are, in some ways, separate or distinct from the other teachers in the school.

**Participant Profiles**

The process of recruiting began in November after I received HSIRB approval. By December, I was able to confirm an instructional coach willing to participate in the study, secure superintendent approval to conduct the study and recruit the first teacher participant. After Christmas break, I scheduled an initial interview with the teacher participant. She then recommended two other teachers from her building who worked with the same instructional coach. The instructional coach shared the teacher participant recruitment letters with these two teachers, who signed them and scheduled interview times with me. These three teachers and instructional coach comprised all of the participants in this study and a brief profile of each is provided below. The teachers were very accommodating in scheduling the initial interviews, the observation of instructional coaching sessions, and the cognitive interviews, all within a span of 15 days. Table 2 provides basic information to begin introducing the three teachers and one instructional coach. To introduce each study participant, I provide a brief summation of professional experience and current professional assignment.

**Darla**

Darla is a teacher of a 3rd and 4th grade split classroom, meaning that half of her students are in 3rd grade and half are in 4th. This complicates her lesson planning process, as we will explore more in depth below, by requiring her to, at times, plan material that is grade level appropriate for both grades. Darla has taught for 25 years, with time spent in 2nd grade, 3rd grad, 4th grade, 5th grade, and 6th grade. She has a Bachelor of Science from University E and 18 additional credits from University B.
<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Profile Information</th>
</tr>
</thead>
</table>
| Darla (teacher)         | • Grade level: Split 3rd and 4th grade classroom  
                          • Teaching experience: 25 years  
                          • Education: Bachelor of Science and 18 additional credits  
                          • Instructional coaching experience: Has worked previously with a coach for 2 years on Writing |
| Erica (teacher)         | • Grade level: Kindergarten  
                          • Teaching experience: 21 years  
                          • Education: Bachelor of Arts and Master of Arts in early education  
                          • Instructional coaching experience: Has worked previously with a coach for 2 years. Focus this year is on confidence and Writing |
| Katrina (teacher)       | • Grade level: 1st grade classroom  
                          • Teaching experience: 10 years  
                          • Education: Bachelor of Science  
                          • Instructional coaching experience: Has worked previously with a coach for 2 years on Writing. Focus this year is on Writing and planning instructional units |
| Veronica (instructional coach) | • Teaching experience: 20 years  
                          • Instruction coaching experience: 1 year  
                          • Education: Bachelor’s in Pedagogics, post graduate honors degree in education, and is currently enrolled in educational leadership master’s program  
                          • Coaching load: Two schools, with 10 teachers total |
Darla presented herself as a teacher leader and overachiever compared to other teachers. When speaking of her grade level partners, she referenced how she had to “hold their hands” to get work done. She described her colleagues who were resistant to participating in instructional coaching as having the “impression that they are not good enough” and “close minded.” Conversely, Darla described herself as not “feeling threatened” by collaborating with an instructional coach and that she “loves trying new things.” This enjoyment of trying new instructional strategies led her to seek support from an instructional coach because she found that she was trying to implement too much and “it was overwhelming.

She shared how other teachers looked up to her for advice. For example, she attended a technology conference and afterwards her colleagues were “lined up” to see her with questions when she returned to school. Darla also shared a story of when she was assigned to teach writing to all 2nd grade students in the building, because their test scores were low. At the end of the first year, the students experienced so much growth that she was recognized at a staff meeting and received a standing ovation.

Lesson Planning

Darla plans lessons for 3rd and 4th grade Writing, ELA, and Social Studies. She also plans lessons for 3rd grade Math and Science, but a colleague teaches her 4th grade students Math and Science. Darla has one grade level colleague in 3rd grade and one in 4th grade that she does not plan lessons with.

Instructional Coaching

This is Darla’s third year of having an instructional coach. She had the same coach for 2 previous years. She requested to focus the instructional coaching sessions this year on Writing.
The instructional coach, Veronica, identified Darla needing support in differentiating her writing instruction for her 3rd and 4th grade classroom.

**Erica**

Erica is in her third year of teaching Kindergarten after having previously spent 18 years teaching pre-school at a private school. Erica has a Bachelor of Arts from University A and a Master of Arts in Early Education from University B. Erica demonstrated characteristics of being shy and uncertain. For our first interview she asked another teacher, Katrina, to join us. Katrina also participated in the study and was interviewed immediately after Erica, and she would frequently speak over Erica to interject a point or clarification during Erica’s interview. Erica spoke softly, slowly, and hesitantly during the first interview, but in the cognitive interview that took place after the instructional coaching session, she spoke more confidently.

Erica repeatedly expressed that she lacked confidence, saying that “coaching has helped me in feeling confident.” She said that she struggled with comparing herself to the other Kindergarten teacher, who was known by the rest of her colleagues as having high student achievement with her classes. Erica said that not having as many years of experience as her grade level partner made her doubt her lesson planning choices. Erica laughed when asked if she collaborated with her Kindergarten partner when planning lessons and described her as being “old-fashioned.”

Veronica, the instructional coach, identified confidence as being an area that Erica could grow in. Veronica said, “I have seen so much progress with her. She has changed as a teacher who had no confidence and is now wanting to tackle this big project.”
Lesson Planning

Erica plans the lessons for all the subject areas for her Kindergarten students including Writing, ELA, Math, Social Studies, and Science. She has one grade level colleague in Kindergarten that she does not plan lessons with.

Instructional Coaching

This is Erica’s third year of having an instructional coach. She had the same coach for 2 previous years. She requested to focus the instructional coaching sessions this year on Writing. Veronica identified Erica as needing support in developing her confidence. Erica repeatedly said she felt in need of confidence because of pressure she put on herself by comparing her instruction to that of her grade level partner.

Katrina

Katrina has taught 10 years total and is in her third year at working at the Midwestern school in which the study takes place, which is her third school. She earned her bachelor’s degree from University B. Katrina said that she does not meet frequently with her grade level teams. At the time of the study, had held about two professional learning community meetings in the school year. Katrina laughed when I asked if they could plan lessons during their professional learning community meetings. Katrina made judgmental statements towards her colleagues, including the building principal and a Title I paraprofessional. Regarding the principal, Katrina said she was glad to have an instructional coach help her as the coach “knew what she was talking about” when compared to the building principal. Regarding the Title I paraprofessional, she had interrupted the first interview to ask Katrina a question and once she left the room, Katrina said, “You should already know that, duh.”
The instructional coach, Veronica, stated that Katrina has “wonderful ideas” but does not know “where to put them.” Throughout the interviews, Katrina expressed that she was so experienced in teaching that she could “wing it,” meaning she could improvise instruction without extensive planning beforehand. She admitted that lesson planning was not a strength and in a previous position at a different school district, her grade level colleague did a considerable amount of the lesson planning for the two of them, while Katrina would help her in photocopying papers and preparing materials. Katrina was proud of several of the activities she had planned for previous lessons, going into great detail describing them and how students responded.

**Lesson Planning**

Katrina plans lessons for ELA and Math for her classroom. She also plans and provides instruction for the entire 1st grade in Writing and Social Studies. She does not plan lessons or provides instruction for Science, as her 1st grade partner does so. Katrina does not plan lessons in collaboration with this 1st grade partner.

**Instructional Coaching**

This is Katrina’s third year of having an instructional coach. She had the same coach for 2 previous years. She requested to focus the instructional coaching sessions this year on Writing. Veronica identified Katrina’s area of improvement as structuring her lessons and instructional units. Katrina frequently used the term “winging it” to describe her lesson planning process and admitted this was an area she needed assistance in.

**Veronica**

Veronica is in her first year of being an instructional coach for an intermediate school district. She previously taught for 20 years and worked as a lead teacher and mentor, coaching
young or struggling teachers for most of her career. She earned her Bachelor of Pedagogics (majored in English and science education) from University C and earned a post graduate honors degree in Education (specializing in School Environmental Education) from University D, both in South Africa. She is currently enrolled in educational leadership master’s program at University B.

During the instructional coaching sessions, Veronica was a vocal cheerleader for the participating teachers she met with. She would repeatedly say “yes,” “absolutely,” and “that is a great idea” in response to the instructional ideas that the teachers would share. With each teacher, she would remind them of the impact they are having on students, making statements such as “your kids have grown so much this year.” It was apparent, even behind the fabric mask she wore due to COVID-19 safety protocols, that she was smiling throughout the entire instructional coaching sessions. Veronica’s encouragement was demonstrated not only through her affirmations, but also her volunteering to find materials or assist in the teacher’s classrooms and in the encouraging tone that she used throughout each of the coaching sessions.

Veronica works with one other school district besides School A. The other school had not offered in-person instruction prior to the time when this study took place. Veronica spends 2 days a week at School A in-person and supports the other school virtually the remainder of the week. Besides the three teachers from School A, Veronica supports seven other teachers from another district, for a total of 10 teachers for whom she provides instructional coaching support.

**The Data Collection Process**

I used the initial interview protocol (Appendix D) to conduct each of the initial interviews. The interviews took place within the teachers’ classrooms so they would feel comfortable and to allow them to access materials. I was able to interview teachers during their
regular work hours, as the school district was providing instruction virtually for all students the week after Christmas break. During the initial interview, teachers were asked for copies of written lesson plans, which they did not have. However, they shared example worksheets, including graphic organizers, that they used during their most recent lessons.

The observations of coaching sessions and the cognitive interviews also took place during the regular working hours of the teachers and instructional coach. These either took place during the teachers’ lunch hours when they normally met with the instructional coach or during the afternoon of a half day with students. The final interviews used a cognitive interview protocol (Appendix E). Two teachers wrote down their lesson plans during this interview, while one had a print off of instructional resources including activities and topics to cover during the unit to which she referred.

With the cognitive interview approach, I used strategies recommended in previous studies, including asking participants to “think aloud” as they planned their next lessons in writing and paraphrasing their answers for clarification (Sofaer, 1999). Participants indicated their cognitive processing by thinking aloud, responding to how I paraphrased their thoughts, and answering follow up questions. Participants were very prepared as they had previously discussed this unit of study during their previous instructional coaching session, which for each teacher was the day before the cognitive interviews. Once teachers had exhausted the explanation of their thoughts, I asked the reflection questions as listed on Appendix E.

After conducting initial interviews and coaching session observations for each of the three participating teachers, I conducted the interview with the instructional coach (Appendix G). Each interview and observation was planned to last 60 minutes; however, when conducted
they varied in length from 35 to 60 minutes. Interviews were recorded using my password protected iPhone and were transcribed and coded for data analysis.

**Data Analysis**

After each interview and observation were completed, I transcribed the interviews and observations. I completed each transcription within 24 hours after the interview was completed so it was easier to recall the context and intended meaning of participants.

**First Cycle Coding**

Using the transcriptions, I completed in vivo codes, which are codes that “emerge from the actual data as they are collected” (Marshall & Rossman, 2011) and falls under Saldana’s (2013) elemental method of first cycle coding. I analyzed each transcription for keywords or phrases such as “impacting nouns, action-oriented verbs, evocative word choices, clever or ironic phrases, similes, and metaphors” (Saldana, 2013, p. 75). I analyzed the transcriptions in the order that the interviews were conducted. As described in Chapter III, I utilized the Saldana’s elemental method of first and second cycle coding (2013). The codes that emerged during the first cycle of coding included references to teachers having a growth mindset, confidence, insecurities, ways that the instructional coach assisted them, and different elements of their cognitive process of lesson planning. Nuances about each of the teacher participants and how they were influenced by instructional coaching in developing instructional plans began to emerge after the first coding cycle of instructional coaching session transcriptions, and finally reached a point of richness and depth after the cognitive interviews were conducted.

The first cycle of analyses of the instructional coaching sessions revealed many codes based on action-oriented verbs, including student engagement, supports for students, high expectations, and learning objectives. The final cognitive interviews revealed the repetition of
numerous terms that had appeared in earlier interviews, including how to engage students, but the use of the terms focused more on the structure of their use within the lesson plans or instruction unit rather than the process of exploration during the coaching sessions. The cognitive interviews also differed in tone, with teachers demonstrating more confidence regarding their decision-making process in comparison with having a collaborative tone of brainstorming during the instructional coaching sessions. As categories of codes emerged, I identified participant quotes that might illustrate a key point in the emerging patterns of codes (Foss & Waters, 2016) for each participant. I revisited each transcription once the data collection was completed, looking for more relevant quotes for the categories already created and to evaluate if any category was overlooked. I then began to compare the codes for each participant, synthesizing them to create categories than were consistent throughout.

**Second Cycle Coding**

I then used the pattern coding method as part of the second cycle of coding (Saldana, 2013), identifying emergent themes from the categories and organizing them into explanatory and meaningful groups. I accomplished this by creating a Google Document with all of the categories and supporting codes and writing memos through the comment function on the documents. These groups included the descriptions of the lesson planning process, the importance of participating in instructional coaching, how teachers make decisions during the lesson planning process, and the impact of instructional coaching on their cognitive process. Table 3 below has a more extensive list.

I synthesized the categories with the most codes to identify emergent themes. These themes began to emerge as I reviewed the codes, with the most salient to my research questions becoming more apparent with each visit. These emergent themes were then organized based on
relevance to the research questions, which are explored later in this chapter. Once organized by research question, I reviewed my literature review to identify what themes supported previous research or was a new finding. The emergent themes that were developed were reviewed after receiving member checking feedback from the teachers and instructional coach, as well as my own bracketing, which is described below.

**Credibility**

The interview with the instructional coach served the purpose of triangulation, as her insights into the personalities and cognitive process of lesson planning was invaluable in providing another source of perspective on the same phenomenon. It was clear to me during her interview that the familiarity from working with these teachers for the previous 5 months was evident. As mentioned above in Chapter III, in vivo coding as “a method of attuning yourself to participant language, perspectives, and worldviews” (Saldana, 2013, p. 48) was essential for me to become acclimated to the shared language of teaching, coaching, and lesson planning that participants used in the interviews.

Lesson plans were requested before the initial interview, but all three teachers shared that they do not write their lesson plans out. The written lesson plans were to serve as another source of triangulation. Instead, teachers were asked to share the physical copies of graphic organizers, worksheets, or other resources they prepared and used in the lessons with students that teachers referred to during their interviews. These documents did not provide additional themes but reinforced what the teachers had said by demonstrating how teachers actually utilized the strategies discussed with the instructional coach planning their instruction.
Initial Themes

After conducting initial interviews, thematic elements emerged during data analysis regarding similarities that participating teachers shared, including their mindsets regarding professional growth and their perception of collaborating with colleagues. These thematic elements are informative in conceptualizing this particular case, as Stake (1995) said that researchers are to “take a particular case and come to know it well” (p. 8). Again, the purpose of an instrumental case study approach is to improve understanding of broader issues, in this case, the process of decision-making in lesson planning after participating in professional development, through the analysis and investigation of a specific case (Stake, 1995). The purpose of this instrumental case study is to know the lesson planning process well within a specific group of teachers within the context of one school building. The similarities these teachers have regarding mindset and experience with collaboration with colleagues, as well as their different personalities affect their response to instructional coaching and how the instructional coach differentiates her work with each teacher.

Through second cycle coding and examination of the thematic elements through the lens of the study research questions, I was able to crystallize the essence of common experience and use those crystallizations to develop thematic statements in two categories. First, I was able to capture themes that illustrate the essence of how the case participants understand and relate to the instructional coaching experience. Second, I was able to distill themes that respond to the framework of my research questions. Table 3 provides a summary of the major thematic elements that emerged through first and second cycle coding.
Table 3

First and Second Cycle Analysis Codes

<table>
<thead>
<tr>
<th>First Cycle Thematic Elements</th>
<th>Second Cycle Thematic Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Growth mindset</td>
<td>• Process</td>
</tr>
<tr>
<td>• Confidence</td>
<td>• Similarities and differences between teachers</td>
</tr>
<tr>
<td>• Insecurities</td>
<td>• Teacher personalities</td>
</tr>
<tr>
<td>• Specific ways that the instructional coach assisted teachers</td>
<td>• Descriptions of the lesson planning process</td>
</tr>
<tr>
<td>• Different elements of their cognitive process of lesson planning.</td>
<td>• Importance of participating in instructional coaching</td>
</tr>
<tr>
<td>• Student engagement</td>
<td>• How teachers make decisions during the lesson planning process</td>
</tr>
<tr>
<td>• Supports for students</td>
<td>• Impact of instructional coaching on their cognitive process</td>
</tr>
<tr>
<td>• High expectations</td>
<td>• Impact of instructional coaching on professional growth and morale</td>
</tr>
<tr>
<td>• Learning objectives</td>
<td>• Feelings on collaborating with colleagues</td>
</tr>
<tr>
<td>• Collaborative tones during instructional session</td>
<td></td>
</tr>
<tr>
<td>• Decisive tones planning lessons</td>
<td></td>
</tr>
<tr>
<td>demonstrating a more confident</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 presents the first three themes describing how the teachers relate to and make sense of the coaching experience. To distinguish these themes from themes that relate to the specific study research questions, I have labeled the first three themes, *Teacher Participant Orientation to Coaching Themes*. In the next section of this chapter, I will present and discuss the research question themes.
Table 4

Teacher Participant Orientation to Coaching Themes

<table>
<thead>
<tr>
<th>Teacher Profile Themes</th>
<th>Supporting Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme 1:</strong> Teachers participating in instructional coaching view themselves as having a growth mindset while they view their colleagues as having a fixed mindset.</td>
<td>“I do not feel threatened by instructional coaching, although I know other teachers feel threatened and that is why they do not do it. I know I do not know everything and the more brains you bring together, the better,” said Darla.</td>
</tr>
<tr>
<td><strong>Theme 2:</strong> Teachers participating in instructional coaching value the structure that results from the coaching but enjoy not having structure as an administrative mandate.</td>
<td>“Thank God our principal does not require us to submit lesson plans… It is amazing that Veronica has helped me create a scope and sequence for the entire school year,” said Katrina.</td>
</tr>
<tr>
<td><strong>Theme 3:</strong> Teachers participating in instructional coaching volunteer to participate in receiving it to meet a specific personal need.</td>
<td>“I felt more comfortable after coaching. She gave me confidence that my ideas were actually working,” said Erica.</td>
</tr>
</tbody>
</table>

**Discussion of Teacher Orientation to Coaching Themes**

**Theme 1: Teachers Participating in Instructional Coaching View Themselves as Having a Growth Mindset, or “Coachable,” While They View Their Colleagues as Having a Fixed Mindset or in Their Words “Old School”**

As shown in Table 4, theme 1 revealed that teachers participating in instructional coaching view themselves as having a growth mindset, or “coachable,” while they view their colleagues as having a fixed mindset or in their words “old school.” Each of the three teachers who participated in this study expressed the belief that they held growth mindsets, opposed to their colleagues who held fixed mindsets. This was plainly stated by all three when they were asked what motivated them to participate in instructional coaching. Although instructional coaching was made available to the entire teaching staff of 12 at School A, only the three teachers who participated in this study volunteered to participate. All three had worked with the
previous instructional coach for 2 years, so when Veronica was assigned to be the new coach at School A, the building principal approached Darla, Erica, and Katrina to make sure they were going to work with her. “He knew I was coachable,” said Katrina. “He emailed the whole staff but knew it was going to be the same three people.”

The three teachers also believed parts of their personalities allowed them to effectively work with an instructional coach. “Personality is a big part of being coachable, and the willingness to try something new,” Katrina said. “And to admit that maybe I am not the best teacher and could still get better.” Darla said that she does not feel threatened by coaching as other teachers do. “I do not take it as I am not doing a good job,” Darla said. “I take it as I can do a better job.”

Repeatedly, participants shared how valuable coaching was because of the process of self-reflection. They were disappointed by the fact that their colleagues, and specifically their grade level partners, did not participate in instructional coaching. Erica described her grade level partner as being “old school” and not willing to collaborate. “Some of them have been here for 20 plus years and they have a mindset they do not need a coach; they have got it down,” Katrina said. “I feel it is important to have coaching because it is hard to self-reflect all the time.”

Darla said that she believes other teachers avoid instructional coaching because they struggle with insecurity and believe they are “not good enough.” Darla explained how other teachers have commented that they do not want coaches to report on them to the building principal, as it would negatively impact their evaluation. Darla on the other hand has used evidence from her coaching sessions as evidence that she is improving as a teacher.
Theme 2: Teachers Participating in Instructional Coaching Value the Structure That Results From the Coaching but Enjoy not Having Structure as an Administrative Mandate

Theme 2 revealed that teachers participating in instructional coaching value the structure that results from the coaching but enjoy not having structure as an administrative mandate. School A lacks structure in several areas. School A’s building principal does not require lesson plans to be submitted, there are no district created curriculum maps, and there are no purchased reading curriculum programs. Erica shared that she is thankful that her building principal does not require lesson plans to be submitted. However, she said that one of the main motivations for her to leave her previous job at a private school was to be able to receive more support and structure at a public school.

Erica also appreciated that although she would prefer more professional development time, the professional development time that was scheduled within their master calendar was free for them to participate in trainings of their choice. Erica said that most professional development is not relevant to the Kindergarten grade level and when it is, she believes it is not developmentally appropriate and expects too much of students.

All three teachers expressed how they appreciated the administration allowing them to teach standards in whatever order they would like and that there was little accountability. This provides them freedom that they value and believe that it is less stressful than it would be otherwise. Although they each lamented not having a purchased reading curriculum program that includes instructional materials and lesson plans, they said that they enjoy the freedom and creativity of making a program on their own. “I would not know what to do if I had a canned program,” Darla laughed.
Overall, the teachers’ perspective is that having an outside expert provide feedback for professional growth is essential. “It’s a little different than having your principal say do this. It’s different when you have someone who actually knows how to coach.” said Katrina.

**Theme 3: Teachers Participating in Instructional Coaching Volunteer to Participate in Receiving it to Meet a Specific Personal Need Such as Writing Instruction**

Theme 3 revealed that teachers participating in instructional coaching volunteer to participate in receiving it to meet a specific personal need such as writing instruction. Katrina shared that she was thankful that Veronica had helped her in developing a structured writing curriculum, as well as assisting her in creating a scope and a sequence for the entire school year. A scope and sequence is the order of what learning standards would be taught throughout the school year and how they would be taught and assessed. Although Katrina said that after teaching for so many years, she felt comfortable “winging it,” she said that having a structured curriculum would be beneficial. Veronica said in her one-on-one interview that she identified a lack of long-term planning and structure as an area of growth for Katrina and was also planning on assisting her in developing a scope and sequence for the entire school year for her Reading curriculum.

All three teachers expressed that they appreciate instructional coaching, as it enables them to collaborate with someone when planning lessons. Similar to Theme 1, their grade level partners did not express desire to plan together, which created a void in having a colleague to collaborate with. All three described their grade level partners as being “old school” and not wanting to change instruction.

Erica expressed feelings of inferiority when discussing her grade level partner, because her partner has taught Kindergarten longer and has excellent results with student achievement. Veronica shared that she has observed these feelings from Erica. Veronica said it seems like
Erica seeks affirmation in her lesson planning and instruction. Erica repeatedly said the word “confidence,” acknowledging that instructional coaching helps her in building her confidence.

Darla expressed to Veronica that she needed to improve in writing instruction. She recognized that she struggled in planning writing that engaged her 3rd and 4th grade students and sought help to specifically improve in this area.

In the interview with the instructional coach, Veronica said that she differentiated her coaching for the needs of each teacher. For Erica, she focused on building her confidence. Veronica said that Erica compares herself to the other Kindergarten teacher who has had many more years in that position and has impressive student achievement results. Veronica said she has seen how Erica has improved her confidence by being able to plan major projects, such as the story unit that the two of them work on together during the instructional coaching observation. Veronica said that Katrina needed a lot of help with structure and planning. Katrina has many creative ideas but lacks the organizational skills to structure those ideas into a coherent instructional unit. Veronica now sees Katrina with lesson plans that span several weeks and is now much more prepared for class. For Darla, Veronica said she struggled with planning writing for her class that is split between 3rd and 4th grade students, many of whom have special needs. Veronica helped her evaluate early literacy essentials on incorporating authentic writing assignments and incorporating writing on a daily basis.

Findings

Based on the data analysis, including coding of interviews, observations, and teacher provided documents, recurring findings emerged that aligned with the research questions. The findings are supported by excerpts from the transcribed interviews and observations. It should be noted that the terms instructional “activities” and “strategies” are repeatedly used throughout.
The common use of these terms within the interviews is that activities is what the students do, while strategies are what the teacher does to assist student learning. For example, a teaching strategy may be for teachers to read a sample narrative piece while the students’ activity is to fill out a graphic organizer based on it. Teachers will also refer to the general use of a learning activity as a strategy. For example, the repeated use of a graphic organizer is referred to as a strategy.

Finding 1: Teacher Cognitive Processes Focused on the Selection of Activities to Utilize in Introducing or Practicing the Development of Skills

Throughout all of the interviews, it was clearly evident that participants planned lessons around what activities students would perform in class. When asked during the initial interview what the lesson planning process looks like for them, they explained how they identify what objective students needed to work on next and what activity they could use to accomplish that objective. This was consistent with each content area they created lesson plans for including reading, math, science, social studies, and writing. For example, when Katrina planned a reading lesson on identifying character emotions, her first thought was what activity could they do with the Elephant and Piggie book by Mo Willems to learn that skill.

Because each participant had requested to work with the instructional coach on instruction for writing, the focus of interview questions was regarding their lesson planning process for writing. Erica similarly said that her main strategy for instruction is facilitating activities or games to introduce topics and to practice skills. She structures her reading and writing instruction by utilizing centers and providing instruction in small groups. While she provides instruction to one group, two other groups are in a center practicing a writing skill or in one of two centers that are play based. She plans these centers on what she believes students can
do independently and what activities will keep them actively engaged, so she can provide small
group instruction without interruption. This will be further discussed in Finding 3.

Planning writing instruction for Darla’s class had an additional level of complexity as it
consisted of two grade levels, 3rd and 4th grade. Darla said that she starts with the “big idea,”
meaning what learning standard the lesson’s objective would include. All three participants
expressed that they do not refer to the Common Core Learning Standards but know them from
memory after teaching for so long. Once she has identified what the learning objective will be,
she considers what activity would be engaging for the entire class and appropriate for both grade
levels of students.

Finding 2: Teachers Consider Background Knowledge of Students and What is the Next
Logical Step in Progression for Students in a Particular Skill

Throughout the interviews, the teacher participants referred to the need of meeting the
students’ current curricular needs and differentiating instruction to meet those needs. They
explained that the main reason they do not utilize a scope and sequence, which outlines what
learning standards to teach and when, is due to students beginning each school year at different
ability levels compared to previous years and teachers have to adjust their instruction
accordingly.

This consideration of identifying the status of student learning plays a primary role in the
professional development they receive during instructional coaching. During the instructional
coaching sessions I observed, Veronica began each meeting asking the following questions,
“How did the lesson go? What are some of the glows and grows that you had?” These questions
not only prompt teachers to reflect on the effectiveness of their instruction but to also identify
what instructional objectives they may need to reteach or to provide additional instruction on.
During the initial interviews, the participants were asked to describe their lesson planning process. Each participant said they begin by identifying the students’ current ability levels and identifying what objectives would be next in a logical progression in developing those skills and content knowledge. For example, Darla said “What I do is the running record. So within their running record, I will see where what they’re having difficulties with, if it’s with syllables, or phonics, or they don’t know how to look for details, or whatever.” As described above in Finding 1, the participants then contemplated what classroom activities to utilize in delivering instruction on the content or in having the students practice it independently.

Finding 3: Consideration of Instructional Activities to Utilize in the Classroom Concentrated on Activities That Would Benefit Specific Students, be Engaging, or Ahat are Developmentally Appropriate

Teacher participants would share that during the cognitive process of lesson planning, they would visualize how specific students would respond to activities that they were considering using. These specific students that came to mind were students who had previously struggled being actively engaged in class and demonstrated disruptive behavior. Darla, in particular, repeatedly mentioned how challenging it was to find activities that actively engaged her special education students. Notably, there was one student for whom she had to find alternative activities when she anticipated that the activity she chose for the class to perform would not be successful in engaging him. “Student personality, student strengths and weaknesses have to be taken into account for sure. I have a little guy who is odd. He gets frustrated so fast and he turns the whole class. If I can get him engaged in something it makes a huge difference,” said Darla.

The teacher participants all had a variety of resources in their room they would refer to when searching for activities or instructional strategies to use when lesson planning. As they would review these activities, they would consider what would engage students, visualize how
specific students would respond, and reflect on what had been effective when they had used it in the past.

A component of the cognitive process for Erica is her consideration of whether her students can perform the activities independently. She explained how it is a significant factor if her Kindergarten students can perform activities without her constant supervision and without interrupting her for assistance as she provides small group instruction.

I have to think about how I have to keep an eye on certain kids and if they’re not capable of doing it. Behavior is a big thing, managing that and giving them things. That is why I went to play centers, to give them something to engage them. That is a huge aspect of centers, when it comes to lessons. Also, whether they need hands on lesson or if I can just talk, like read a story and then go off of that story.

Erica also explained how when she researches online or through the resource books she has for instructional activities and strategies, she considers what is developmentally appropriate for her students. She said a common barrier to using recommended activities that are provided from professional development she has attended is whether it is developmentally appropriate for her students. She finds, often, what is presented at professional development is too advanced for her students and is not developmentally appropriate.

When Katrina explained her approach to planning lessons, she gave several examples of activities she used in class that the students found highly engaging. These included motions they performed along with a learning strategy, such as pointing to themselves or around the room when describing what character and setting is in a work of fiction. She also utilized several activities involving food to illustrate a learning objective. These included the use of a
watermelon to demonstrate different scales of time, with the seeds representing small moments and the whole watermelon representing an entire day.

**Finding 4: Teachers Make Repeated use of Instructional Strategies Over an Extended Amount of Time That Were Provided by or Created With the Instructional Coach**

When analyzing the data from this study’s interviews and observations, a theme emerged throughout that the strategies shared by the current instructional coach as well as the instructional coach who had previously worked with the participating teachers for 2 years were regularly used. During the cognitive process of lesson planning, all three participants would refer back to strategies that they had learned about during an instructional coaching session, including anchor charts, Writing Toolbox, the creation of rubrics, Writing Centers, or graphic organizers.

During the instructional coaching sessions, I observed that their instructional coach, Veronica, would provide an example graphic organizer that they could use for their current learning objective. For example, Veronica shared a graphic organizer with Erica for her students to create a beginning, middle, and end for their story. For Katrina, it was a graphic organizer for students to structure their persuasive writing piece that had the acronym OREOs (Opinion, Reason, Example, Reason, Example, Opinion restated).

When conducting the cognitive interviews the day after the instructional coaching sessions, the participants would refer back to discussions with the instructional coach and what they had discussed together. During the cognitive interviews, the teachers would take those concepts they discussed with the instructional coach, and further develop them on paper. This further development included pacing and how long each strategy would take, specifying the number of times students were to repeat an activity, and identifying what order to do the activities. For example, Darla explored what texts to use and to do a comparison and contrast assignment using it based on her coaching session with Veronica.
Our next writing lesson we are going to keep working on comparison and contrast. One of the things I want us to do, but I did not bring this up yesterday, but Veronica reminded me because we had talked about it previously, was fairy tale comparisons, like the fractured fairy tales they have out there. I would like to compare the fairy tales to traditional, not quite proper Grim Fairy Tales, but watered down a little bit. And do a comparison and contrast of that.

There are multiple examples that the participants would use these strategies for years after being introduced to them. This includes the Writing Toolbox that Darla had created along with the instructional coach she had previously worked with. This tool consists of writing strategies for students and acted as a student resource they can unfold and refer to when they are writing. This has served as a major strategy in supporting students learning and was still being utilized after 3 years, being modified over time by Darla.

All three participating teachers utilized anchor charts, which were first introduced to them 3 years ago by the previous instructional coach. Anchor charts consist of a list of learning objectives (e.g., starting a sentence with a capital letter) that the teachers create with input of their students. The chart is then hung on the classroom wall and referred to throughout the rest of the instructional unit.

**Finding 5: Teachers Immediately Consider and Apply Strategies They Learned During Instructional Coaching and how They can Apply Them**

The teacher participants demonstrated that they immediately apply what they learned during the instructional coaching sessions to their lesson plans. During the cognitive interviews that took place the day after the instructional coaching session, teachers demonstrated immediate application by taking the activities discussed and organizing them into a coherent weekly plan. Teacher participants shared with me that they have all attended a professional development
conference and stored the materials on a shelf, never to have revisited them again. The reason why the application of the learning from instructional coaching is more straightforward than learning from a more general professional development conference is because a significant component of instructional coaching is planning activities and units of study collaboratively to meet current classroom needs.

Also, as described in the teacher participants’ profiles above, these teachers consider themselves to be open-minded and having a growth mindset. They value the input and the reflection provided through the instructional coaching process. Teachers not only immediately considered the instructional strategies that they discussed during instructional coaching, but they applied them immediately into their lesson planning. During Darla’s introductory interview, I asked her about previous professional development she had attended and how it had changed her classroom instruction. She listed several examples, including observing reading instruction at a neighboring school district and how they allowed students to use their own book of choice during instruction. The very next day, Darla experimented with this strategy and has been using it now for the past 3 school years. She explained how although it is more work to have students using a variety of books, they are more engaged by having a text of their choice to work from. Darla also shared how the previous instructional coach had developed a group of four different reading centers that would engage students as she provided small group instruction. She had asked for assistance in finding a productive way to engage students while she provided instruction to small groups. The instructional coach developed a plan utilizing four different stations, including spelling practice activities and using a supplemental computer program, *Moby Max*, which Darla immediately implemented.
Based on the previous experiences that each teacher participant shared, this emerged as a pattern of behavior for each of the teachers. All three demonstrated that the learning strategies discussed during their instructional coaching sessions were applied immediately, as they put these strategies into practice the following day when they planned lessons during their cognitive interview. Darla explained that selecting strategies to implement in the classroom can be overwhelming, as teachers are presented with so many through professional development, the classroom resources they use to assist in planning, and when conducting online research. Darla said she tries to pick out two or three strategies at a time to utilize and sticks with them if they work. She said that if teachers avoid experimentation of using new strategies, they are likely to resort to using the same worksheets every year, as she has observed in the behavior of other teachers.

When describing using a graphic organizer that Veronica provided for her, Katrina described how she adopted the graphic organizer immediately after Veronica adopted it for her us. Katrina said,

It is something she found and put it into the Drive. This is the opinion writing that goes with it. We smooshed it down because the regular one had two reasons and two examples, it was super long, so we took it out so they could have the easier version of it.

Erica explained that the benefit in trying new strategies immediately that were learned from instructional coaching sessions is that she can learn from trial and error. If a strategy is not as effective as she anticipated, she can meet with Veronica to evaluate how to improve it. As Veronica is available 2 days a week to meet with in-person and is available to teachers by phone
at any time, teachers do not need to wait long for an opportunity to evaluate with Veronica the next steps in improving their instruction.

**Finding 6: Teachers Expressed More Confidence in the Lesson Planning Process After Participating in Instructional Coaching**

A focus on instruction activities during the cognitive process of creating lesson plans was consistent before and after having participated in professional development, as discussed in Finding 1 above. The difference is that after having participated in the professional development practice of instructional coaching, teachers had more confidence in the activities that were selected. During the instructional coaching sessions I observed how the instructional coach, Veronica, would continually use verbal forms of affirmation, such as saying “yes” or “absolutely” as teachers shared their ideas and point out how successful the teacher was in increasing student engagement or learning with previous activities. Veronica also showed physical forms of affirmation including an encouraging tone and body language that showed full engagement including taking notes, leaning forward, and nodding her head.

Although Veronica worked with all of the participating teachers on improving their writing instruction, she differentiated her support based on their specific personalities and grade level needs to increase teacher confidence. For Erica, Veronica’s main objective was to build Erica’s overall confidence and support her in implementing into the classroom her ideas. Erica felt insecure with her instruction and compared herself to her grade level colleague who was more experienced in the grade level and had historically high student achievement data. Erica had also commented during her initial interview that she struggled with confidence and that she has found instructional coaching has drastically increased it. She said that this was evident in the writing project she was currently planning with Veronica, saying that she would not have attempted to do such an ambitious project previously.
During the cognitive interview, Erica expressed confidence in planning, quickly stating exactly what the activities were for each day along with their learning objectives and showing flexibility by saying how some activities would take longer and she would adapt accordingly. She explicitly said at the end of the interview that instructional coaching has assisted her in being able to focus on the needs of her students, rather than feeling like she needs to compete with the other Kindergarten teacher. This was also reinforced during her instructional coaching session. At the end of each coaching session, Veronica asks the teachers how their conversation has helped their planning of lessons. Erica said that the coaching session helped her have a more defined plan and confidence to try something new. Erica said that she often feels as though the other Kindergarten teacher has a different plan of instruction, which causes her to question her own instructional plans. She said that instructional coaching has given her confidence to try more difficult assignments and challenge her students academically.

Erica also shared that work with the previous instructional coach improved her confidence. After spending 18 years as a preschool teacher, she was unsure of what was developmentally appropriate for Kindergarten students and the coach helped her feel confidence in her decision making in that regard. About this, she said,

Especially with writing, I have definitely changed how I teach writing. I look for bigger projects now and not just stick to basic, like how do you write this sentence. I am looking for that now. I would not have done the Froggy story writing unit last year, and now I am like OK, I am going to try this. It has helped me find a path to do more meaningful activities.

Although Darla and Katrina did not explicitly share that they struggled with confidence as Erica had, they did state that instructional coaching gave them more confidence during the
lesson planning process. Darla was working on planning a compare and contrast writing unit with Veronica. Darla stated during the initial interview that she valued instructional coaching because it provided her an opportunity to self-reflect, which she did not normally make time for. She further elaborated after her instructional coaching sessions by saying that she enjoys coaching so much because it allows her to think of her reasoning behind her lesson planning decisions, therefore, giving her more confidence in her lesson planning choices. Similarly, Veronica said that her focus when working with Darla was to help her focus on one idea at a time. With Darla having so many ideas, she feels overwhelmed and uses the instructional coaching sessions as an opportunity to process those ideas, receiving feedback that gives her confidence in her decision making.

Katrina did not explicitly express a lack of confidence but demonstrated it by questioning her decision making and admitting she lacks structure in her lesson planning. Even during the cognitive interview while she was verbalizing her cognitive process of lesson planning, she paused and asked me a specific question regarding how she should organize her narrative writing unit. However, she still demonstrated much more command of how she would plan the next unit of study after her the instructional coaching session. During the initial interview, she shared how Veronica had assisted her in creating a scope and sequence for the entire school year for her writing curriculum. She said she looked forward to working with Veronica on planning her next unit of study, which was narrative writing. During the coaching session, Katrina brought examples of student work to show me, and Veronica had praised her for the effectiveness of her opinion writing unit. During the cognitive interview, Katrina quickly identified how she would structure her next unit of study, which she discussed with Veronica the previous day. She also shared how optimistic she was for next school year since she now had a scope and sequence and
is able to know what she would teach at the beginning of the year, which she was not able to do in the past. Veronica told me during her one-on-one interview that her goal was to have Katrina more organized in her lesson planning for reading as well. She noted Katrina’s increase in confidence and believed that improving her planning for reading would increase her confidence even more so.

**Finding 7: Teachers Demonstrated Increased Structure to Their Daily Lesson Plans and Long-Term Plans of Instruction After Participating in Instructional Coaching**

As described in Finding 3, Veronica specifically focused on coaching all three participants on the structuring of instructional units, selecting activities, and using instructional strategies when facilitating those activities. For Katrina, Veronica assisted in creating an entire scope and sequence for her writing curriculum, outlining what standards to teach and when to do them throughout the school year. Katrina had general ideas, such as covering an instructional unit on narrative and persuasive writing but lacked what order to cover them and what concepts and standards would be taught in each unit. After participating in instructional coaching, Katrina demonstrated that she understood what content to cover for her next unit of study, what order to provide instruction on that content, and how long it would take, which was 9 weeks. Katrina showed me a document during the cognitive interview that Veronica had created listing resources to be used in her narrative writing unit.

During the cognitive interviews, all three teacher participants were able to quickly articulate what their next unit of study would include. This demonstrated that they had synthesized the input and resources that Veronica had provided during their instructional coaching sessions. As described above, Katrina had a general plan for the next 9 weeks of the semester, which was an instructional unit on narrative writing. She summarized during the
cognitive interview her lesson plans for the following week. Her lesson plans consisted of daily activities and assessments.

Katrina elaborated on how instructional coaching helped her instructional planning become more structured by saying,

When I was working on opinion writing, we had kind of done opinion writing but it wasn’t very structured. She helped me put it into a more concrete layout and then we did a graphic organizer of the Oreo. We did a hook lesson I brought in Oreos for the kids, we are working on sensory details. I put an Oreo on the overhead projector and talked about the sensory details of it. They finally had to have a bite of it for the very last one, the taste. And that really stuck with them.

After the hook, we break it down to the parts of writing.

During Erica’s cognitive interview, she planned lessons for her next unit of study, which was students writing their own story based on a character in a children’s book, Froggy. This story writing unit would begin the following week and she estimated it would be three weeks long. However, Erica anticipated that some activities may take longer to complete, and some concepts may need to be retaught which would extend the length of the unit. Her lesson plans consisted of daily activities, assignments, and what students would do in the four writing centers they would rotate through. These centers consisted of activities including receiving small group instruction with the teacher, practicing writing letters, making a Froggy puppet, and playing at the toy kitchen in the classroom. Darla was also starting a new unit on comparison and contrast writing the following week. During the cognitive interview, she planned lessons for the following week, including the worksheets she would use, instructional activities, and assignments.
Finding 8: The Teachers’ Cognitive Process of Lesson Planning Changed to Consider the Instructional Strategies and Resources Shared by the Instructional Coach

As discussed in Finding 3, instructional strategies shared during the instructional coaching sessions were considered by teachers to use as they planned lessons. What was observed during this study was that potential ideas for lesson plans were discussed during the instructional coaching sessions, but teachers left the actual creation of lesson plans for after the coaching session was finished. The instructional coach and teacher participants shared that they often create specific lessons collaboratively during the instructional coaching session. However, during this study, teachers waited until the following day after the coaching session to plan lessons in their entirety, which was observed during our cognitive interviews.

Not only did teachers consider these strategies, such as the use of graphic organizers for narrative writing unit or for comparison and contrast writing unit, but they also considered the resources that the instructional coach provided for them. This included mentor texts and anchor charts. For example, Katrina and Veronica discussed what mentor texts Katrina would use as an example of identifying an attention getter in a narrative piece. Veronica suggested a book that Katrina would use, which Katrina then discussed during her cognitive interview, explaining how she would use that in a lesson and at what point within the instructional unit in which it would be used.

Veronica was able to see evidence of the teachers applying the strategies and resources she shared with them by the teachers’ testimonies and example student work. She noted:

I am seeing the strategies changing and the way that they’re teaching. Because not only are we planning the activities, I tell them and model for them that when you do the initial lesson this is what you’re going to do. This is how you’d introduce the lesson, and these are the words you’d say. I don’t know if they’re doing it but
based on the feedback they’re using these examples and the way that I model for them, they’re using them in the class.

Another example is how Darla considered her lessons through the interpretive lens of providing students with choice. She shared that during a previous professional development training, she had learned the importance of allowing students to select their own reading materials for reading instruction. During the cognitive interview, she demonstrated repeatedly the desire to apply student choice to every activity she planned, including the comparison and contrast writing assignment, and also even the creation of a grading rubric with the entire class. By allowing the entire class to participate in the creation of the grading rubric that would be used on their comparison and contrast writing assignment, she believed students to be more motivated and have a greater understanding of the assignment.

Finding 9: Instructional Coaches use Instructional Unit Planning as a Way to Incorporate Strategies That Improve Student Improvement

During the one-on-one interview with the instructional coach Veronica, I pointed out that it was interesting that a considerable amount of her conversations with teachers involved planning their next unit of study. She explained that this was partially due to the timing of the observations, as they were all approaching the point where their next unit of study was to begin. However, she also pointed out that she capitalizes on the planning of units as an opportunity to introduce strategies that fundamentally improve the instruction of teachers. For example, when assisting Erica in planning a story writing unit, Veronica introduced the strategy of utilizing a graphic organizer that would challenge students to write complete sentences for each component of the story. She then suggested that students record their own stories and share it with parents and other classes, which provides them with an authentic audience.
To transform Katrina’s instruction, Veronica had previously used the opportunity of planning a persuasive writing assignment, to recommend the use of graphic organizers that requires students to support their arguments with examples. With the narrative writing unit I observed them creating collaboratively, she was using it as an opportunity for students to learn components of a story and applying it to their own story. The document that Veronica created for Katrina included many strategies to utilize within the narrative writing unit. Explaining how she coached Katrina, Veronica said,

When I started, I help pace out the writing from K-5, and each teacher identified priority standards that they were going to focus on this year. Based on that, I helped them pace out their units. With her, she had all of these wonderful ideas. She had ideas for opinion writing but did not know where to put them. So, we started at the beginning this is what we are going to do.

By assisting teachers in planning units, Veronica was able to make suggestions on how they can deliver the content, improve the engagement of students, and increase the instructional rigor. Erica recognized this change in her instruction. She said that she is now confident in her ability in lesson planning and that she is now trying projects that students are finding more meaningful and engaging. She said that prior to working with an instructional coach, she would have never attempted to plan such a long-term unit or believed that students were capable of writing a story.

**Finding 10: Teachers use the Process of Self-reflection During Instructional Coaching to Identify Content That Necessitates Reteaching to Improve Student Achievement**

The first question Veronica asks during instructional coaching sessions is how the teacher’s previous lesson went and what their “glows and grows” would be. Teachers then reflect on the student performance on assessments and their acquisition of the content delivered. They
discussed with Veronica the cause of student achievement results and if the content needed to beetaught. All three teacher participants commented on the importance of this self-reflection step,
saying this was the primary reason they participated in instructional coaching. “That’s why I
enjoy coaching so much because the questions that they ask me really help me be able to think
what my reasoning was for doing that, how I could have done it better, and gives me clarity,”
said Darla. The teachers said that they saw the value in self-reflection but were unable to make
the time to perform it independently outside the structure of instructional coaching
sessions. Katrina said, “I feel it’s important to have coaching because it’s hard to self-reflect all
the time and you need that outside person to critique you.”

Lacking a grade level colleague to plan with was also a challenge that each teacher
participant faced. They referred to their grade level partners as being “old school” and resistant
to changing their instruction. Therefore, they utilize the instructional coaching sessions instead of
collaborating with their grade level teams to plan lessons and reflect on the success of these
lessons. Utilizing an instructional coach to plan with allowed them to experiment with their
instruction and receive immediate feedback. “For me it is a little of trial and error. Because the
instructional coach is right here, I can go try things. That didn’t work and then I see her and she
can help me,” said Erica.

**Finding 11: Teachers Incorporate New Instructional Strategies Into Their Lesson Plans That They Expect will Increase Active Student Engagement**

As described in Finding 5, Erica collaborated with Veronica during her instructional
coaching session on developing a writing unit that was more engaging for students. Erica
explained that instructional coaching has assisted her in implementing more “meaningful”
activities. Erica shared with Veronica how excited students were when she explained that they
were all going to write their own *Froggy* story. She said that without instructional coaching, she
would have likely continued to repeatedly use the same writing assignments that require students to write simple sentences about a specific topic such as cats or dogs. Instructional coaching has given her the confidence to plan a unit on a grander scale that she believes will increase student engagement because the students will find the assignments more meaningful.

During the cognitive interview with Katrina, after she was finished planning her lessons for the following week, I asked her what motivates her decision making when planning lessons. Katrina said that she wants her lesson plans to be “engaging,” and for students to interact with the stories at a level where they can “relate to them.” She said that if students can relate to the stories, they will have more “buy in” to learn and complete the assignments.

Darla explained that when she requested for Veronica to help her in planning writing instruction, the goal was to improve engagement and for Veronica to help her find different activities that she could do. When asked how she identifies instructional strategies are effective, Darla said that she looks for excitement and engagement. She said that if she sees students excited and engaged, then they will put the effort needed to learn.

**Finding 12: Teachers Select New Instructional Practices to Incorporate Into Their Lesson Plans That They Anticipate will Lead to Increased Student Ability to Complete Assignments Independently**

Each teacher participant was asked what the learning objective was for the strategies they selected to use in their instructional units. The answer for each was for students to be able to complete the task independently, whether that was composing a compare and contrast piece, a narrative, or story about the literary character Froggy. “A lot of things I think about is if I give this group something, are they capable of doing it without being a distraction to my other groups. I have to think about if they are capable of doing it independently,” said Erica.

Monitoring student progress in meeting the learning objective of completing the task independently was performed by unpacking the learning objective into smaller objectives for
students to complete independently. For example, for Erica’s students to compose their own story, she would first observe if they could compose their own beginning, middle, and finally the end of the story. A component of the instructional coaching sessions was the unpacking of learning objectives into mini lessons in order to focus providing instruction on the smaller objectives. Veronica assisted teachers in unpacking the standards and brainstorming what strategies to use for each mini lesson that would compose the overall learning unit.

Table 5

*Summary of Findings With Illustrative Quotes*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding 1: Teacher cognitive processes focused on the selection of activities to utilize in introducing or practicing the development of skills.</td>
<td>“Our next writing lesson we are going to keep working on comparison and contrast. One of the things I want us to do, but I did not bring this up yesterday, but Veronica reminded me because we had talked about it previously, was fairy tale comparisons, like the fractured fairy tales they have out there. I would like to compare the fairy tales to traditional, not quite proper Grim Fairy Tales, but watered down a little bit. And do a comparison and contrast of that,” said Darla.</td>
</tr>
<tr>
<td>Finding 2: Teachers consider background knowledge of students and what is the next logical step in progression for students in a particular skill.</td>
<td>“How did the lesson go? What are some of the glows and grows that you had?” said Veronica.</td>
</tr>
<tr>
<td>Theme</td>
<td>Illustrative Quote</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Finding 3: Consideration of instructional activities to utilize in the classroom concentrated on activities that would benefit specific students, be engaging, or that are developmentally appropriate.</td>
<td>“I have to think about how I have to keep an eye on certain kids and if they’re not capable of doing it. Behavior is a big thing, managing that and giving them things. That is why I went to play centers, to give them something to engage them. That is a huge aspect of centers, when it comes to lessons. Also, whether they need hands on lesson or if I can just talk, like read a story and then go off of that story,” said Erica.</td>
</tr>
<tr>
<td>Finding 4: The repeated use of instructional strategies over an extended amount of time that were provided by or created with the instructional coach.</td>
<td>“I have been using anchor charts for three years since my previous instructional coach showed them to me,&quot; said Darla.</td>
</tr>
<tr>
<td>Finding 5: Teachers immediately consider strategies that they learned during instructional coaching and how they can apply them.</td>
<td>“I try to model how to use the graphic organizer, when I am setting up a lesson, show the kids multiple times how to do it and have them help. Veronica came up with that. We talked about that together. Veronica said that I could keep doing those over and over. I thought, yeah I could, we could constantly discuss character, the problem and the solution, that type of thing. Just so it goes right into the project,” said Erica.</td>
</tr>
<tr>
<td>Finding 6: Teachers expressed more confidence in the lesson planning process after participating in instructional coaching.</td>
<td>“Especially with writing. I have definitely changed how I teach writing. I look for bigger projects now and not just stick to basic, like how do you write this sentence. I am looking for that now. I would not have done the Froggy story writing unit last year, and now I am like OK, I am going to try this. It has helped me find a path to do more meaningful activities,” said Erica.</td>
</tr>
<tr>
<td>Theme</td>
<td>Illustrative Quote</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Finding 7: Teachers demonstrated increased structure to their daily</td>
<td>“When I was working on opinion writing, we had kind of done opinion writing but it wasn’t very structured. She helped me put it into a more concrete layout and then we did a graphic organizer of the Oreo. We did a hook lesson I brought in Oreos for the kids, we are working on sensory details. I put an Oreo on the overhead projector and talked about the sensory details of it. They finally had to have a bite of it for the very last one, the taste. And that really stuck with them. After the hook, we break it down to the parts of writing,” said Katrina.</td>
</tr>
<tr>
<td>lesson plans and long-term plans of instruction after participating</td>
<td>in instructional coaching.</td>
</tr>
<tr>
<td>Finding 8: The teachers’ cognitive process of lesson planning</td>
<td>“I am seeing the strategies changing and the way that they’re teaching. Because not only are we planning the activities, I tell them and model for them that when you do the initial lesson this is what you’re going to do. This is how you’d introduce the lesson, and these are the words you’d say. I don’t know if they’re doing it but based on the feedback they’re using these examples and the way that I model for them, they’re using them in the class,” said Veronica.</td>
</tr>
<tr>
<td>changed to consider the instructional strategies and resources</td>
<td></td>
</tr>
<tr>
<td>shared by the instructional coach.</td>
<td></td>
</tr>
<tr>
<td>Finding 9: Instructional coaches use instructional unit planning</td>
<td>“When I started, I help pace out the writing from K-5, and each teacher identified priority standards that they were going to focus on this year. Based on that, I helped them pace out their units. With her, she had all of these wonderful ideas. She had ideas for opinion writing but did not know where to put them. So, we started at the beginning this is what we are going to do. She came up with all of these ideas for the units of writing and we paced them through all the weeks. Now she is going into class knowing exactly what she’s doing. Kids are excited,” said Veronica.</td>
</tr>
<tr>
<td>as a way to incorporate strategies that improve student improvement.</td>
<td></td>
</tr>
</tbody>
</table>
Table 5—Continued

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding 10: Teachers use the process of self-reflection during instructional coaching to identify content that necessitates reteaching to improve student achievement.</td>
<td>“For me it is a little of trial and error. Because the instructional coach is right here, I can go try things. That didn’t work and then I see her and she can help me,” said Erica.</td>
</tr>
<tr>
<td>Finding 11: Teachers incorporate new instructional strategies into their lesson plans that they expect will increase active student engagement.</td>
<td>“Friday, I’ll start doing centers. That is where Veronica came in, she got me the Froggy stick puppets. She didn’t say it to me but I automatically thought they should do that at the center and thought they could act out what their story could be,” said Erica.</td>
</tr>
<tr>
<td>Finding 12: Teachers select new instructional practices to incorporate into their lesson plans that they anticipate will lead to increased student ability to complete assignments independently.</td>
<td>“A lot of things I think about is if I give this group something, are they capable of doing it without being a distraction to my other groups. I have to think about if they are capable of doing it independently,” said Erica.</td>
</tr>
</tbody>
</table>

Summary of Findings

The findings of this study suggest that the professional development activity of instructional coaching plays a central role in the cognitive process of lesson planning for teachers who participate in it. The teachers who participated in the study emphasized the importance of self-reflection to their professional growth and in improving instruction. Further, they were in full agreement that instructional coaching provided an opportunity to self-reflect on a regular basis. This self-reflection, along with the confidence gained through support of the instructional coach and the resources the instructional coach provided, led to teachers being able to approach the lesson planning process with more confidence, structure, and strategies that they believed would lead to increased student engagement and achievement.

The instructional coaching process provided opportunities for teachers to find support in structuring their planning and to receive resources, which played a role in their cognitive process.
as they synthesized those strategies with past experiences. This resulted in the creation of lesson plans that built upon previously used instructional approaches and were transformed by the application of strategies learned from instructional coaching.

Student achievement truly played an essential role in the lesson planning process and instructional coaching sessions. The needs of meeting specific student needs were the foremost consideration of the instructional coaching sessions, leading teachers to evaluate what instruction was effective in increasing student achievement and engagement. The needs of students were also a driving force of the cognitive process of lesson planning as teachers considered what strategies and delivery of instruction would most effectively engage them.

This study also found that teachers who participated in instructional coaching consisted of a small percentage of teachers within their school building. The teacher participants believed they held growth mindsets and participated in instructional coaching because they were open to constructive criticism. They also believed their colleagues were more resistant to change, felt threatened by working with an instructional coach, and avoided collaborating with their grade level partners.

Finally, the findings suggest that instructional coaching is an effective form of professional development, as it leads to improving instruction through the immediate application of strategies in the lesson planning process that has long lasting effects. The teachers who participated in this study continued to consider within the lesson planning process strategies that had been introduced to them by an instructional coach up to three years prior to the study. Chapter V includes discussion and conclusions on the results of this study and recommendations for future research. Chapter V includes the limitations, implications, and educational impact participating in effective professional development such instructional
coaching may have on improving instruction through application within the lesson planning process.
CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this instrumental case study was to examine teachers’ experiences with the lesson planning process after having participated in the professional development activity of instructional coaching. As described in Chapter II, previous research on professional development has explored the characteristics of professional development that effectively change teacher practices and improve student achievement. Previous research on lesson planning has primarily focused on what student characteristics teachers should consider when planning, the difference of how veteran and new teachers approach planning, and the lack of training in teacher preparation programs on how to lesson plan. The purpose of this study was, therefore, to build upon this previous research, as other researchers have called for more exploration in these areas, such as Guskey’s (2002) call for research on finding ways for teachers to apply new knowledge into practice.

The three teachers who participated in the study shared their own experiences of planning lessons, were observed participating in the professional development activity of instructional coaching and revealed their cognitive process of planning a lesson after participating in instructional coaching through the use of a cognitive interview. Also, the instructional coach with whom all three collaborated was interviewed, with the coach sharing her experience coaching the teachers and how she has observed the change in their instructional practices. The intent of this chapter is to: (a) interpret the findings of this study in consideration of its limitations, (b) compare the findings with previous research on professional development and lesson planning, including how the findings build on that previous research, and (c) make recommendations for future research.
Interpretation of Research Question Results

The main research question of how teachers experience the lesson planning process after participating in instructional coaching was not intended to identify a cause-and-effect relationship. The intended purpose was to provide a greater understanding on how teachers make decisions, and how the information gained during instructional coaching influences those decisions. A concise summary of the findings is that teachers experience lesson planning with more confidence and structure and apply strategies and resources immediately to improve student engagement and achievement. This section reviews my research questions and the themes that emerged from my study. The findings are briefly explained with salient examples from the teacher and instructional coach study participants.

Research Question 1: What are Teachers' Cognitive Processes While Planning Lessons After Having Participated in Professional Development?

The teachers in my study did not seem to change their focus on lesson planning before instructional coaching and afterwards, as they consistently focused on what instructional strategies or activities to use in class. However, the strategies they considered changed based on the input of the instructional coach. This is further explored in Research Question 2 below.

Teachers’ cognitive process involved identifying where students were at developmentally and what they were prepared to learn next. Teachers did not specifically consider learning standards, as they believed they had taught long enough to instinctively know what students needed to learn. Once they identified what students were ready to learn, they considered strategies that would actively engage students, thinking about specific students and how students would respond to the activities. Teachers referred repeatedly back to what strategies had previously been successful, including many that had been introduced through their work with an instructional coach. It was also observed consistently with all three teachers that the strategies
they learned during their instructional coaching sessions immediately played a role in their cognitive process planning lessons.

Research Question 2: How Have Teachers’ Cognitive Processes Changed or Evolved After or During the Process of Participating in Professional Development?

The teacher participants of this study experienced important changes in their cognitive processes as a result of participating in instructional coaching. All three teachers who participated in this study demonstrated increased levels of confidence and an understanding of how to structure lessons and instructional units. Moreover, their cognitive processes were influenced by the strategies and resources shared by the instructional coach.

During their initial interviews, all three teacher participants attested to having more confidence as a result of participating in instructional coaching prior to this school year and including this school year. This increase in confidence was also evident when comparing their beliefs about lesson planning that were shared during the instructional coaching session and the cognitive process interview afterwards. During the instructional coaching sessions, teachers were questioned about how effective strategies would be and what assessments they should assign students. The instructional coach was extremely enthusiastic and encouraging, resulting in teachers being confident in their decisions the next day as they planned their lessons aloud to me during the cognitive interview.

This confidence also contributed to the teachers being able to structure the lessons plans for a week or more, asserting that they believed the lessons would be successful in engaging students and increasing student achievement. During the cognitive interviews, teachers were efficient in outlining what instruction they would provide the following week.

The teachers’ cognitive process demonstrated a change in what was considered, but not necessarily how it was formed or structured. Fundamentally, their decision-making for creating
lessons still relied on identifying what ability level students were currently at and what they were ready for next, as well as what strategies would be most effective in engaging them. These new strategies the teachers considered includes graphic organizers, anchor charts, and centers. One teacher also shared that her lesson planning process changed as she considered incorporating more student choice as part of her instruction. This was a result of professional development that she had attended during a previous school year.

**Research Question 3: How do Teachers Apply Strategies From Professional Development for Improving Student Achievement When Planning Lessons?**

A theme that emerged from this study was that teachers will immediately apply any new strategy they believe is appropriate for their students and that they believe will result in increased engagement and achievement. Teachers shared examples of strategies they learned from an instructional coach or other professional development in previous school years that they implemented as soon as possible, including the very next day after learning the strategy. All three teachers also shared that they had attended professional development conferences where strategies were presented that the teachers then disregarded because they did not find that they were applicable to their class or developmentally appropriate.

The instructional coach also implied that she utilizes helping teachers create instructional units as an opportunity to introduce specific strategies. For example, one teacher struggled planning instructional units, which may last up to 9 weeks of school. While assisting that teacher in planning that unit, the coach would introduce strategies such as the use of graphic organizers to improve that teacher’s instruction. Instructional coaching can, therefore, serve multiple purposes at once in improving teacher instruction.

All three teachers also identified that a benefit of instructional coaching is the opportunity to reflect on the success of previous instruction. Each teacher explained how identifying the
status of student academic abilities was the first step in their lesson planning decision-making process, but they also said that they lacked having time regularly to reflect on the effectiveness of their instruction without the aid of instructional coaching. Instructional coaching, therefore, provided a structured time to conduct self-reflection and was a support in facilitating it.

**Research Question 4: What Student Responses do Teachers Expect From the New Practices They Incorporate Into Their Lesson Plans?**

When planning what instructional strategies to utilize in their lessons, teachers reflected on what strategies would lead to increased student engagement and student achievement. But even more specifically, when they visualized student achievement it was in the form of students being able to complete tasks independently. This was one the standards of success they would use to measure whether the learning objective was met. All three teachers shared that they were going to create anchor charts with their classes that would outline student expectations for that learning objective. Anchor charts were one of the strategies that all three teachers learned from instructional coaching and were a consideration of what students would be able to do.

Also, the cognitive interviews demonstrated that teachers considered how the new instructional practices would engage specific students or student groups who struggled in class. These students included those who were disruptive or who were identified as receiving special education support. Teachers imagine how effective strategies would be for their specific students and whether those strategies effectively engage them. This demonstrates how teachers are motivated to apply learning from professional development when it is applicable to their immediate needs.

**Interpretation of Teacher Orientation to Coaching Themes**

Besides findings related to the four research questions, themes emerged in relation to how teachers were oriented to instructional coaching. These themes included how teachers viewed
themselves as having a growth mindset, that they valued the structure that coaching provided to their instructional planning, and that teachers are motivated to participate in instructional coaching to meet a specific need. These themes demonstrated that the teachers who participate in instructional coaching view themselves as being different from their colleagues, in that they are coachable while their colleagues are resistant to change. They demonstrated this trait of coachability by admitting that they have areas needing improvement, which is what motivated them to seek additional support through instructional coaching.

Interestingly, the teacher participants admitted being more open to coaching from an instructional coach rather than an administrator. They viewed the structure provided to their instruction through the support of the instructional coach as being beneficial. However, they viewed that the suggestion of an administrator requiring structure through a requirement of submitting lesson plans would be unproductive. Teachers expressed gratitude that their administrator did not require lesson plans to be submitted and valued the freedom resulting from a lack of administrative oversight.

Limitations and Recommendations for Future Research

As an instrumental case study, this study was intended to investigate and analyze a specific case to improve understanding that may be applicable to other cases (Stake, 1995). This study was limited in terms of the number of teachers participating, the size, type, and geographical location of the school, and by the fact the teachers were all elementary teachers. These limitations were intentional in that the design of the instrumental case study was intended to investigate and analyze a specific case to improve understanding that may be applicable to other cases (Stake, 1995).
The study was limited to the number of teachers at School A who participated in professional development with the instructional coach. The three teachers who participated in the study were the only teachers within the school who participated in instructional coaching. This limited number of participants was appropriate for the qualitative methodology of instrumental case study that I utilized. This limitation enabled the study to truly reflect on the specific case of the three participating teachers from the school, as it included every single teacher who worked with an instructional coach, but it was limited in the number of perspectives and data points due to the lack of school-wide participation in professional development through instructional coaching. However, future studies might involve a national sample of teachers and instructional coaches, from school districts varying in size and demographics. It is possible that results may differ depending on the school district due to the culture of the school, resources available for teachers, and other professional development initiatives available to the teachers.

A significant limitation for this study was time. To truly evaluate how teachers experience the lesson planning process before and after participating in professional development such as instructional coaching, a researcher would need to observe how teachers planned lessons immediately after they began their careers as a teacher. The study was also developed within the context of a dissertation research project. While this should not serve as an excuse, the timing of when the study was approved by HSIRB was in November, which was not an ideal time, as instructional coaching sessions typically begin at the beginning of the school year or in January, when 2nd semester begins. Future studies might want to include teachers that have just begun their career as teachers, to explore how their lesson planning process matures with the support of an instructional coach.
This instrumental case study did not take into account student achievement but focused primarily on the experiences of the teacher participants. A future study might include analysis of how student achievement is affected by the teacher’s participation in instructional coaching. This is a significant consideration, as the most important measure of whether professional development is effective or “working” is if “teacher enactment yields evidence of improved student learning and performance” (Fishman et al., 2003, p. 655).

Serving as a single researcher was a limitation, as I did all of the data collection, transcribing, coding, theme identification, and analysis. Having a single researcher conducting data analysis may limit the development of themes. Future studies that are broader in scope might include multiple researchers.

The COVID-19 pandemic had a major impact on this study. The additional complication and workload caused by the pandemic, including schools being closed to in-person instruction, cause many instructional coaches and teachers to turn down participating. Many of the instructional coaches I attempted to recruit said that they were unable to recruit teachers to participate in instructional coaching because of the additional complications caused by COVID-19. This limited the recruitment of participants to teachers who worked in a school district that provided in-person instruction. Fortunately, the teacher participants worked at School A, whose superintendent and building principal allowed me to enter the school building to interview the teachers face-to-face, provided that safety protocols such as mask wearing and social distancing were followed.

Finally, my bias as a current administrator had potential to influence the data analysis of this instrumental case study. While I was diligently dedicated to keeping my biases in check by bracketing, there is a possibility that subconsciously I analyzed and interpreted data with bias. I
did, however, mitigate against that bias by repeatedly looking back to the data to confirm that the findings truly are grounded in the data and the themes represent the most prominently and consistently expressed perspectives shared by participants.

**Comparison of Major Findings to Previous Research**

In this section, I will describe and discuss how the findings from my study relate to findings from previous research. First, in Table 6, I provide a synopsis of how the themes relating to each research question aligns with or adds to understandings gleaned from previous studies I reviewed. After Table 6, I provide a discussion of my major findings and offer further examination and discussion of how this study adds to understanding the phenomenon of lesson planning after receiving professional development through instructional coaching.

**Table 6**

*Comparison of Corlett’s Themes With Previous Research*

<table>
<thead>
<tr>
<th>Corlett’s (2021) Themes</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1. Theme 1:</strong> Teacher cognitive processes focused on the selection of activities to utilize in introducing or practicing the development of skills.</td>
<td>Aligns with previous research findings that effective professional development focuses on content and its application to the classroom (Guskey, 2003; Hunzicker, 2011; Jones &amp; Lowe, 1990). Aligns with previous research on lesson planning, including that lesson plans are “a process of preparing a framework for guiding teacher action, a process strongly orientated toward particular action rather than, say, knowledge or self-development. In this view, the planning process involves teacher thinking, decision making, and judgment” (Clark &amp; Yinger, 1979, pp. 8-9).</td>
</tr>
</tbody>
</table>
**Table 6—Continued**

<table>
<thead>
<tr>
<th>Corlett’s (2021) Themes</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1. Theme 2:</strong> Teachers consider background knowledge of students and what is the next logical step in progression for students in a particular skill.</td>
<td>Aligns with previous research that teacher involvement in the curriculum or instructional design varies depending on the district, but all curricula should include the four components of objectives, methods, learners, and evaluation (Kemp et al., 1998).</td>
</tr>
<tr>
<td><strong>Question 1. Theme 3:</strong> Consideration of instructional activities to utilize in the classroom concentrated on activities that would benefit specific students, be engaging, or that are developmentally appropriate.</td>
<td>Aligns with previous research that effective professional development connects to the context of teacher work (Hunzicker, 2011; Mundry, 2005) and that effective professional development is job embedded (Hunzicker, 2011; Mundry, 2005).&lt;br&gt;&lt;br&gt;Aligns with previous research that lesson plans are “a process of preparing a framework for guiding teacher action, a process strongly orientated toward particular action rather than, say, knowledge or self-development. In this view, the planning process involves teacher thinking, decision making, and judgment” (Clark &amp; Yinger, 1979, pp. 8-9).&lt;br&gt;&lt;br&gt;Aligns with research on lesson planning that veteran teachers are flexible in planning lessons and plan instruction based on student needs (Kremer, 1981, p. 24).</td>
</tr>
<tr>
<td><strong>Question 1. Theme 4:</strong> The repeated use of instructional strategies over an extended amount of time that were provided by or created with the instructional coach.</td>
<td>New finding that adds value and insight to professional development and lesson planning in that teachers are likely to repeatedly use strategies they learn over time (Corlett, 2021).</td>
</tr>
<tr>
<td><strong>Question 1. Theme 5:</strong> Teachers immediately consider strategies that they learned during instructional coaching and how they can apply them.</td>
<td>Aligns to previous research that teachers are more likely to retain and transfer the information if activities are designed to create materials they will use immediately in their classes (Jones &amp; Lowe, 1990).</td>
</tr>
<tr>
<td><strong>Corlett’s (2021) Themes</strong></td>
<td><strong>Previous Research</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Question 2. Theme 1:</strong> Teachers expressed more confidence in the lesson planning process after participating in instructional coaching.</td>
<td>Adds to previous research that professional development is more effective when teachers have positive attitudes (Erickson et al., 2005; Scott, 2009).</td>
</tr>
<tr>
<td><strong>Question 2. Theme 2:</strong> Teachers demonstrated increased structure to their daily lesson plans and long-term plans of instruction after participating in instructional coaching.</td>
<td>Adds to previous research on how professional development is effective in changing teacher practice when used “in everyday experiences, such as in classroom settings” (Glazer &amp; Rattigan, 2006, p. 180).</td>
</tr>
<tr>
<td><strong>Question 2. Theme 3:</strong> The teachers’ cognitive process of lesson planning changed to consider the instructional strategies and resources shared by the instructional coach.</td>
<td>New finding that adds value and insight to professional development and lesson planning in that the cognitive process of teachers adapts to consider strategies learned through instructional coaching (Corlett, 2021).</td>
</tr>
<tr>
<td><strong>Question 3. Theme 1:</strong> Teachers apply strategies learned from professional development immediately into the structure of their classroom instruction.</td>
<td>Aligns to previous research that teachers are more likely to retain and transfer the information if activities are designed to create materials they will use immediately in their classes (Jones &amp; Lowe, 1990).</td>
</tr>
<tr>
<td><strong>Question 3. Theme 2:</strong> Instructional coaches use instructional unit planning as a way to incorporate strategies that improve student improvement.</td>
<td>Adds to previous findings that teachers develop knowledge when they interact with curriculum resources (Jones &amp; Pepin, 2016).</td>
</tr>
<tr>
<td><strong>Question 3. Theme 3:</strong> Teachers use the process of self-reflection during instructional coaching to identify content that necessitates reteaching to improve student achievement.</td>
<td>Aligns to previous research that teachers adjust curriculum based on the needs of the students (Shawer, 2010, p. 2).</td>
</tr>
<tr>
<td><strong>Question 4. Theme 1:</strong> Teachers incorporate new instructional strategies into their lesson plans that they expect will increase active student engagement.</td>
<td>Aligns to previous research that teachers should be considering as part of the lesson planning process authentic learning (Merrienboer et al., 2003) that promotes engagement by allowing students to respond to assignments in multiple ways (Lynch &amp; Warner, 2008).</td>
</tr>
</tbody>
</table>
Table 6—Continued

<table>
<thead>
<tr>
<th>Corlett’s (2021) Themes</th>
<th>Previous Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 4. Theme 2:</strong> Teachers select new practices to incorporate into their lesson plans that they anticipate will lead to increased student ability to complete assignments independently.</td>
<td>Adds to previous research on how as part of the lesson planning process teachers should identify learning goals (Marlow, 2004).</td>
</tr>
</tbody>
</table>

**Major Findings and How They Relate to Previous Research**

Through my study, and in consideration of previous research, I have further delineated the characteristics of effective professional development and the cognitive experience of teachers during the lesson planning process. Table 6 above summarizes the themes that emerged from my instrumental case study, demonstrating what previous research the themes align to, add to, or represent new findings. The major findings from these themes include: (1) the teachers’ cognitive process of lesson planning changed to consider the instructional strategies and resources shared by the instructional coach; (2) instructional coaches use instructional unit planning as a way to incorporate strategies that improve student improvement; (3) teachers select new practices to incorporate into their lesson plans that they anticipate will lead to increased student ability to complete assignments independently; (4) teachers demonstrated increased structure to their daily lesson plans and long-term plans of instruction after participating in instructional coaching; (5) teachers expressed more confidence in the lesson planning process after participating in instructional coaching; and (6) the repeated use of instructional strategies over an extended amount of time that were provided by or created with the instructional coach. This section elaborates on the themes that add to previous research or are new in that similar findings were not found during my review of literature.
Previous research had found that effective professional development focuses on content and its application to the classroom (Guskey, 2003; Hunzicker, 2011; Jones & Lowe, 1990). This means that teachers are more likely to apply what they learned from professional development when it applies to the specific needs of their students. My findings not only aligned with Question 1, Theme 1, but also found a new related finding, that teachers will repeatedly use instructional strategies that were provided by or created with the instructional coach over an extended amount of time (Question 1, Theme 4). Not only will teachers use new strategies in their classrooms that they learned about through professional development, but they may continue to use these strategies, regularly, for years to come.

These long-term changes not only include learning strategies, but also how they structure their instruction during class and their long-term instructional units. Previous research has found that effective professional development changed teacher practices “in everyday experiences, such as in classroom settings” and when teachers are supported through collaboration (Glazer & Rattigan, 2006, p. 180). Question 2, Theme 2 of my study adds to this previous research, finding that after participating in instructional coaching, teachers increased the amount of structure in their daily lesson plans and long-term units of instruction. Therefore, I found that teachers not only make changes to their daily experiences but did so over an extended amount of time.

I found that these changes to daily experiences not only applied to the structure of instructional delivery but also applied to their expectations. A theme that emerged was that teachers select as part of their lesson plans instructional practices that will increase a student’s ability to complete assignments independently (Question 4, Theme 2). Previous research has found that teachers should consider identifying learning goals, but this theme builds on that,
finding that teachers explicitly determine the prime criteria of success is for the students to perform a task independently.

A major new finding was how the teachers’ cognitive process of lesson planning changed to consider the instructional strategies and resources shared by the instructional coach (Question 2, Theme 3). As discussed above, previous research has discussed how professional development can change daily experiences (Glazer & Rattigan, 2006, p. 180) and how specific elements are considered during lesson planning, such as how to monitor student progress (Yell et al., 2008); however, I had not found a connection between the two in a review of the literature.

The main research question for this study explores how teachers experience the lesson planning process after participating in the professional development activity of instructional coaching. This study’s major finding is that instructional coaching changes how teachers experience the lesson planning process not only in terms of activities or resources that the coach provided the teachers with, but also through interpreting those activities through the interpretive lens of strategies that they learned about. An example is how a teacher participated in training on providing students choice in the classroom to increase motivation and understanding. During the cognitive interview when I observed her lesson planning process, she interpreted each of her activities through that lens of how to provide student choice for that activity. This included allowing students to select a topic for their comparison and contrast writing, which in turn led to her including students in the process of creating a grading rubric. This is a fundamental change for her, as previously she had created a rubric on her own or used a pre-created rubric from a textbook, as the majority of teachers do.

This finding supports previous research on lesson planning that found several years of previous teaching experience allows teachers to be better prepared in planning lessons, as they
can pull from previous experience. However, having this previous experience does not “guarantee expertise” in lesson planning (Schmidt, 2005, p. 21). The findings from my study demonstrate how, even veteran teachers (as the three participants in this case study ranged from 10 to 25 years of experience) were able to change how they planned lessons by participating in professional development.

Previous research has found that teachers develop knowledge when they interact with curriculum resources (Jones & Pepin, 2016). The instructional coach who participated in my case study used this approach by utilizing support of sharing resources and assisting in the creation of instructional units to improve the instructional strategies of teachers (Question 3, Theme 2). Not only did teachers develop knowledge on the content by interacting with the curriculum resources provided by the instructional coach, but they used that as a starting point to further develop the teachers’ methods of delivery or activities that they use in the classroom.

Ultimately, this work led to teachers having more confidence in the lesson planning process (Question 2, Theme 1). They demonstrated this by saying that they are confident in the selection of strategies and the structure of the lesson plans. They also expressed change from being uncertain regarding what activities to use and how students would respond to those activities, to stating in an assured manner exactly what their lesson plans were and what they expected students to do as a result of the lessons.

These cognitive interviews took place the day after teachers were reassured and encouraged during their instructional coaching session. Previous research found that professional development was more effective when teachers have positive attitudes (Erickson et al., 2005; Scott, 2009). The three teachers explained that they volunteered to participate in instructional coaching because they believe that they had a more positive attitude than their colleagues
regarding being coached and that they had growth mindsets. But they also demonstrated a positive response to being coached and to the results of the coaching. This positive response, therefore, promoted their ongoing participation in instructional coaching, which is significant as ongoing professional development has been found to be more effective than if it was short term (Bayar, 2014; Hunzicker, 2011; Jones & Lowe, 1990; Mundry, 2005). The three coaches explained that they prefer ongoing professional development as it provides them an opportunity to experiment with new strategies and receive feedback from the instructional coach soon afterwards.

**Implications**

The teachers of this study were intended to serve as a case illustrating a larger phenomenon that all teachers experience. Although limited in scope, the investigation of this specific case will likely provide understanding that is applicable to many teachers, administrators, and those who provide training for employees in other work fields. In the sections below, I discuss implications of the findings from this study for teachers, administrators, and other professional fields.

**Teachers**

The teachers who participated in this study had significant benefits that applied to their own emotional health and professional growth. Teachers benefited their emotional health by having an instructional coach to collaborate with so that they did not feel as though they worked in complete isolation. The three teacher participants all shared that their grade level colleagues were not receptive to collaborating. The participants also expressed relief of having someone who was qualified to provide feedback to them.
Professionally, they benefited from the resources, strategies, and time for self-reflection that the instructional coach provided. The teachers recognized the benefits of self-reflection, but admitted that without the instructional coach, they would not allocate time in their schedules to perform self-reflection. The resources and strategies the teachers received saved them time that they would have otherwise spent researching to find on their own. It also allowed teachers to feel a sense of accomplishment as they implemented new strategies that they saw were effective in achieving the desired outcomes of increasing student engagement and achievement. Moreover, one teacher in particular said that she benefited professionally by having more evidence for her yearly evaluation that her building principal conducts. She said that all of the work completed with the instructional coach served as evidence of her commitment to professional growth.

Teachers would benefit from the results of this study by recognizing the benefits of instructional coaching and the limited downside of participating in it. The teacher participants stated that they believed that most teachers in their building did not participate in instructional coaching because they felt vulnerable, insecure, and worried that it would be evaluative. They, however, felt that it was empowering to accept the vulnerability of not knowing everything and receiving support to grow from a professional coach. The instructional coach also confirmed the same feelings and said that it is important for her and the other instructional coaches that she works with to never violate the trust of teachers by sharing information with their building principals that could negatively impact the teachers’ evaluations. The one downside of participating in instructional coaching that was observed in this study was the time commitment required by teachers to meet with the instructional coach every week. However, it was observed that teachers were able to quickly plan their lessons after meeting with the instructional coach, which may reduce the overall time spent on planning lessons.
Teachers could also benefit from the results of this study by understanding that professional development is more effective in helping them improve their instruction if it is ongoing and job embedded. The teachers in this study were able to apply learning from instructional coaching they identified as an area of need, and were able to apply it immediately.

**Administrators**

Only a small percentage (25%) of teachers at School A participated in instructional coaching. Based on input from the instructional coach, this is typical at most schools. It is therefore crucial for school administrators to properly educate their instructional staff on the characteristics of professional development that are effective in improving instruction such as instructional coaching. Administrators can utilize instructional coaching to promote school improvement but must be able to communicate the benefits of participation to motivate staff to partake.

Administrators should also support participation in instructional coaching by providing the time for teachers to receive coaching on a regular basis. The participants in this study used their planning time or lunch time to meet with the instructional coach. By providing time that is structured within normal work hours, administrators could enable more teachers to participate in instructional coaching. Based on the findings of this study, administrators should recognize that professional development must not only be ongoing and job embedded as discussed in the Comparisons to Findings to Previous Research section above, but they should also recognize that staff will implement new strategies immediately if they see value in them.

Other findings from this study that administrators would benefit from is knowing the critical role self-reflection plays in the growth of a teacher. The teachers repeatedly stated, and it was observed in their actions, the immense benefit of self-reflection on their instructional
practices and discussion on how to improve them. Previous research has established the importance of collaboration in professional development to improve instruction (Guskey, 2003; Parise & Spillane, 2010), but administrators need to recognize if that collaboration currently exists in their buildings. If collaboration is not taking place in their building, administrators would need to identify how to address that deficiency, which may include the utilization of an instructional coach.

Overall, administrators must see instructional coaches as partners in supporting their school improvement goals and overall culture of their school building. By supporting the instructional coaches, they can support their entire staff in improving their instruction and increasing student achievement.

**Application to Other Professional Fields**

The findings of this study reinforce many previously studies on professional development and lesson planning, but also contributes to previous research on adult learning theory. These findings can be applied to any professional field dealing with the development of an adult workforce. One new finding in this study is that instructional coaching can increase a teachers’ confidence and use of structure. This could be applicable to almost any professional field. This study shows how ongoing coaching can increase an employee’s confidence in their decision-making processes. The self-reflection that is facilitated by the coach can promote increased efficiency, as the teachers in this case evaluated what worked well and what areas could be improved on in the future. The coaching and self-reflection process also led the teachers to articulate their ideas and planning in a more structured manner, which would benefit an employee in any field that is required to develop a plan of implementation similar to a teacher’s lesson plan.
The findings of this study also support decision-making theories mentioned in Chapter II, including sociocultural learning theory and the self-directed learning philosophy. Sociocultural learning theory holds that learning is a social phenomenon wherein individuals make sense of data and new learning based on everyday contexts and their experiences through activities and social interactions (Marsh & Farrell, 2015). My findings reinforce this, as the teacher participants in the study learned through the social interaction of instructional coaching and were motivated to learn based on learning that they could apply to their everyday experience.

The findings of my study were also consistent with previous literature on self-directed learning philosophy, which holds that adult learners should be developed to be self-directed and proactive in being responsible for their own learning (Merriam, 2001). The teacher participants in this study were responsible for their own learning, as they were not required to meet with the instructional coach. Also, the teachers were self-directed learners as the foci of the instructional coaching sessions were chosen by the teachers and not the instructional coach.

**Closing Thoughts**

The experience of conducting this instrumental case study and composing this dissertation has resulted in a personal epiphany—school districts can be fundamentally transformed using instructional coaching. I was motivated to conduct this study with hope that I could help other school administrators in planning professional development that was effective in changing teacher practice and understanding how that process worked. The study’s findings have accomplished just that, and I believe have contributed to previous research in this area. The study has also demonstrated that school administrators will continue to be challenged in engaging teachers to participate in instructional coaching, as the study’s participants shared that many teachers are hesitant to collaborate with an instructional coach in a relationship that is extremely
rewarding, but also requires vulnerability and a growth mindset. These findings can assist schools in supporting the use of the instructional coaching model, as well as supporting the state legislation that lies behind the funding of instructional coaching supports through the state of Michigan. These findings can also assist administrators and other agencies that provide professional development for education or in other professional fields in understanding how staff apply new strategies or concept to their everyday tasks.
REFERENCES


Skowron, J. (2001). *Powerful lesson planning models: The art of 1,000 decisions*. Hawker Brownlow Education.


Appendix A

Superintendent Participant Recruitment Letter
Superintendent Participant Recruitment Letter

Dear Superintendent,

My name is Kyle Corlett and I am a Ph.D. student at Western Michigan University and superintendent at Delton Kellogg Schools. I am writing to ask you for permission for three to five of your elementary teachers to participate in a qualitative research study entitled “Investigating the Connection Between Professional Development and the Lesson Planning Process.”

I am studying how teachers apply concepts from professional development activities into their lesson planning process as part of the requirements for a doctoral degree in Education Leadership.

For teachers to participate in the study, they must commit to be interviewed by me twice, allow me to observe their lesson planning process, observe their instructional coaching, and share two lesson plan documents. Also, I would need to interview the instructional coach that the teachers work with once at the conclusion of the study.

If you are interested in learning more about this study, please contact me by replying by email to kyle.b.corlett@wmich.edu or by phone (269) 953-2201.

Sincerely,

Kyle Corlett
Appendix B

Teacher Participant Recruitment Letter
Dear Superintendent,

My name is Kyle Corlett and I am a Ph.D. student at Western Michigan University and superintendent at Delton Kellogg Schools. I am writing to invite you to learn more about participating along with three to five of your elementary teacher colleagues in a qualitative research study entitled “Investigating the Connection Between Professional Development and the Lesson Planning Process.”

I am studying how teachers apply concepts from professional development activities into their lesson planning process as part of the requirements for a doctoral degree in Education Leadership.

For teachers to participate in the study, they must commit to be interviewed by me twice, allow me to observe their lesson planning process, observe their instructional coaching, and share two lesson plan documents. Also, I would need to interview the instructional coach that the teachers work with once at the conclusion of the study.

If you are interested in learning more about this study, please contact me by replying by email to kyle.b.corlett@wmich.edu or by phone (269) 953-2201.

Sincerely,

Kyle Corlett
Appendix C

Participant Consent Form
Principal Investigator: Dr. Patricia Reeves, Ph.D.
Student Investigator: Kyle Corlett
Title of Study: Investigating the Connection Between Professional Development and the Lesson Planning Process

You have been invited to participate in a research project titled "Investigating the Connection Between Professional Development and the Lesson Planning Process." This project will serve as Kyle Corlett’s dissertation project for the requirements of the Ph.D. in Educational Leadership. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study? The purpose of this study is to examine the process of lesson planning after teachers participate in professional development, specifically instructional coaching. Corlett will observe the instructional coaching process, lesson planning process, and interview participants at the beginning and end of the instructional coaching process.

Who can participate in this study? West Michigan elementary teachers are eligible to potentially participate in this study. Random drawings of all potential participants have/will occur until 3-5 teacher participants give their consent to participate.

Where will this study take place? The face-to-face interview or engagement location will be arranged mutually between you and Kyle Corlett. This interview will take place in a private setting, likely within your school/district. E-mail correspondence can be conducted anywhere you choose.

What is the time commitment for participating in this study? The duration of this study will not last more than two week’s time and will require a maximum of six to seven hours of active participation on your part.

What will you be asked to do if you choose to participate in this study? If you decide to participate in this study, you will be asked to:

• engage in three face-to-face interviews or engagements of approximately 60-120 minutes in length with Kyle Corlett. To ensure the accurate transcription of your responses, the interview will be recorded using a computer and/or iPhone recording device. You will be able to ask the interviewer to turn off the audio recording equipment at any time during the interview.
• verify that the transcript of your interview is correct and complete. This activity will take place via e-mail correspondence. The anticipated time for this task is 60 minutes.
What information is being measured during the study? This study seeks to understand teachers’ decision-making process when planning lessons. Your participation will provide information on your decision-making process when planning lessons over the period of time of the study.

What are the risks of participating in this study and how will these risks be minimized? The time you take to participate in this study, up to six hours over two week’s time, can be considered a risk on your part. This risk is minimized through Kyle Corlett’s adherence to the activities and time approximates outlined in this consent form.

What are the benefits of participating in this study? There is no direct benefit to you for participating in this study beyond the professional growth provided by reflecting on your own lesson planning process. On a broader scale, you could potentially provide helpful information to the academic discipline of educational leadership and/or educational practitioners who are learning how to integrate and foster teacher leadership in their schools.

Are there any costs associated with participating in this study? Other than your time, there are no costs to you for participating in this study.

Is there any compensation for participating in this study? There is no compensation for participating in this study.

Who will have access to the information collected during this study? No one other than Kyle Corlett will know that you, specifically, have participated in this study. Your principal who selected you as a potential participant will not be notified should you choose to participate or should you choose to not participate. Furthermore, you will be referred to through the use of a pseudonym in the writing of the findings of the study. Your information (in pseudonym form), as part of the whole study, will be shared in Kyle Corlett’s written dissertation, the oral defense of that dissertation, and at any time may be used as part of one or more publications.

What if you want to stop participating in this study? You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study. The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the student investigator, Kyle Corlett, at (269) 953-2201 or kyle.b.corlett@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study. This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.
I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

________________________________________________________________________

Please Print Your Name

________________________________________________________________________

Participant’s Signature                                      Date
Appendix D

Initial Interview Protocol
Initial Interview Protocol

Introduction: Thank you for being willing to participate in my case study research. I truly believe this is an important topic that my help a lot of schools improve their professional development and help teachers in understanding professional development and lesson planning. As a reminder, the study is looking at how teachers experience lesson planning after participating in professional development. As educators we have all been to good and bad professional development. What this study is intended to do is not evaluate if professional development is good or bad, or evaluate how you lesson plan, but to better understand it. Therefore, I really appreciate your honesty, and your time, in participating in this study. This interview is going consist of three different parts. The first part is to get to know you a little. The second is to let you “think aloud” as you plan a lesson. The third part is to reflect on your experience with lesson planning and professional development. Although I have questions to guide the conversation, please feel free to share anything you think is important or that comes to mind. Let us begin by getting to know you a little bit.

Part 1- Introduction Questions

1. What grade level do you teach and how long have you taught it?

2. For what content areas do you plan lessons for?

3. Please describe how you currently plan lessons. Does your process differ depending on content area?

4. For the following questions, let us discuss Reading instruction. Is there a curriculum program you are expected to follow?

5. Are you required to submit lesson plans to the building administrator?

6. Do you have an example lesson plan document you could share with me? If so, can you walk me through it and explain the different parts of the document?
7. What materials do you use when planning lessons?

8. Do you collaborate with your grade level team when planning lessons? If so, what does that look like?

Part 2- Thinking Aloud

9. Can you tell me what you are thinking as you begin your lesson planning?

10. Can you explain out loud what you are doing for each component of your lesson plan?

11. What is the purpose of each component?

12. How did you determine what objective to have, actions to do, and student actions?

13. Are you thinking at all about the recent professional development you have participated in?

14. What do you anticipate student response will be from the practices you use?

15. How do you anticipate this lesson will improve student achievement?

16. What evidence will you observe to measure student achievement?

Part 3- Reflecting on Lesson Planning and Professional Development

17. What student characteristics do you consider when planning lessons? Such as learning styles, student personalities, etc.

18. Are there any school wide initiatives that you are required or feel obligated to include in your lesson plans? If so, at what point of the process do you consider them.

19. Can you describe how you initially learned how to do lesson plans?

20. How would you describe how your lesson planning process has changed since you first started teaching? Why has it changed?

21. What professional development have you participated in recently?
22. Can you describe how you applied learning from that professional development to your classroom instruction?

**Follow-up e-mail correspondence activities will include:**

- Checking, verifying, and (if desired) expounding upon the transcript of this interview.
- Writing responses to direct questions concerning teacher leadership. Do you have any questions or concerns at this time?

Finally, may I please confirm with you your preferred e-mail and phone contact information?

**Preferred e-mail:** ________________________________________________________________

**Preferred phone contact:** (___)____________________________
Appendix E

Final Interview Protocol
Final Interview Protocol

Questions will be formulated based on the first initial interviews with teachers, as well as their lesson plan documents, but will include the following concept questions.

1. What are teachers' cognitive processes while planning lessons after having received professional development?

2. How might such cognitive processes have changed from the teachers’ previous practice?

3. How do teachers apply strategies from professional development for improving student achievement when planning lessons?

4. What student responses do teachers expect from the new strategies they incorporate into their lesson plans?

Based on the teachers’ initial interview answers
Appendix F

Interview Protocol for Instructional Coach
Interview Protocol for Instructional Coach

1. What is your current position?
2. How long have you been in it?
3. What were your previous positions?
4. What made you want to be an instructional coach?
5. How many teachers do you currently work with right now?
6. Let’s talk about each of the three teachers you work with at School A. How have you seen Erica’s instruction change since you began working with her?
7. How has Katrina’s instruction change?
8. How has Darla’s instruction change?
9. What evidence do you look for when you’re working with them?
10. It is mainly activities or are you seeing them change the strategies they use in class?
11. How do you work with them differently?
12. Is there anything specific that you want to work on. For example, does the ISD want you to work on anything specific, or are you focusing on what each individual teacher needs?
13. What training have you received to be an instructional coach?
14. What instructional strategies have you suggested teachers use and have you seen evidence of them utilizing those strategies?
15. Have you seen a difference in the culture of this school compared to others?
Appendix G

Coaching Conversation Questions Used by Instructional Coach Study Participant
Coaching Conversation Questions Used by Instructional Coach Study Participant

Coaching Conversation

Date: __________  Coachee: ______________

Previous goals:

Reflection

How did the lesson go? What are some of the glows and grows that you had?

What might your next goal be?

How are you hoping to accomplish the goal? What is your vision for your lesson/unit?

How is it connected to the standards? Essential practices?

What might your lesson sequence/plan look like?

What strategies and instructional practices will you use? Have you had success with these strategies before?

What student outcomes will indicate that you have been successful? What data will you collect?

How long do you anticipate that the lesson will take?

With regards to the outcome/product, what choices will you provide for the student?

How will you differentiate your lesson to help support student learning?

As we wrap up our coaching conversation, let us review our next step for our next conversation.
Reflection of coaching conversation

How has our conversation supported your thinking?

Where are you in your thinking compared to where you were at the start?
Appendix H

Western Michigan University Human Subjects Institutional Review Board
Date: November 9, 2020

To: Patricia Reeves, Principal Investigator
    Kyle Corlet, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 20-10-20

This letter will serve as confirmation that your research project titled “Investigating the Connection Between Professional Development and the Lesson Planning Process” has been approved under the expedited category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., add an investigator, increase number of subjects beyond the number stated in your application, etc.). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) November 8, 2021 and each year thereafter until closing of the study.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.

Note: If in the future you start in person observations, you will have to require an approved research restart plan in order for the study to be implemented.