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Elementary (K-5) Teachers' Perceptions of Differentiated Instruction

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Walden University
2015

Abstract

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Christopher Maddox

M.Ed., Lesley University, 2001

BS, Taylor University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Differentiated instruction is a pedagogical method used by classroom teachers to enhance student learning. Researchers have described how students benefit from differentiated lessons, but have not explored the relationship between teachers' perceptions of differentiation and student success. This gap is problematic because teachers' instruction directly affects student achievement. The purpose of this hermeneutic phenomenological study was to explore how elementary (K-5) teachers define, familiarize, use, and perceive differentiation. The conceptual framework was rooted from a synthesis of ideas found in current refereed literature, and the educational concepts and constructionist theories of Piaget and Vygotsky. Purposeful sampling identified 12 participants for individual or focus group interviews. Data were analyzed through an interpretative analysis of open, axial, and selective coding; interpretations were subject to member checking to bolster trustworthiness. The findings revealed that teacher participants understood the textbook definition of differentiated instruction and focused on student grouping to create differentiated classrooms. Despite that understanding of differentiation, participants perceived differentiation as time consuming and challenging due to a lack of materials and diverse populations. Implications for social change focus on mindset and instruction. Administrators and teachers may use these findings to broaden the definition of differentiation. Furthermore, teachers may use this study to gain insight of their personal perception of differentiation, identify materials, and commit to improved pedagogical practices that focus on its versatility in classrooms and improve student learning. Teachers may consider the participants' experiences and change their own existing classroom environments, thus improving student successes.

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Dedication

This dissertation is dedicated to my family members who passed away during this doctoral of philosophy journey:

- Father, November 14, 2009
- Grandmother, August 28, 2012
- Nephew, May 9, 2013
- Aunt, June 5, 2014
- Mother, September 3, 2014

All are greatly missed and loved; mom, I think about you every day and know you are proud of my accomplishments. You are my example of God's eternal love.

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Chapter 1: Introduction to the Study

Introduction

Teachers fulfill many multiple responsibilities within school systems; such roles include coach, counselor, mentor, facilitator, and supervisor. But their primary role as instructor supersedes all other responsibilities and requires them to fully understand their students and subject matter; one strategy to assist teachers in this process is differentiation. The purpose of this study was to explore how elementary (K-5) teachers perceive differentiated instruction. Studying teachers' knowledge of differentiation is important because little is known about how they experience differentiation; the population of this study was elementary (K-5) teachers because they provide the initial instruction for students.

There are multiple definitions and guidelines about the topic of differentiation that cause confusion within the education profession (Tomlinson, 2013). Authors document the success of differentiation, but do not state the nuances of teachers' knowledge and experience with the strategy. The potential social implications of this study include information on how a group of teachers view this phenomenon and provide, perhaps, some transferability by encouraging other teachers who review this research to consider their own personal experiences with differentiated instruction and elicit social change.

In Chapter 1, I introduce the various components of the study including the background, problem statement, purpose of the study, and conceptual framework; in addition, research questions and applicable definitions, along with the nature, scope, limitations, and significance of the study appear in this chapter.

Background

Britzman (2009) suggested that school districts create a paradox within classrooms by professing to be advocates for individual learning, yet struggle to promote professional staff development that effectively discusses content and instructional practices; Britzman stated,

> Education is a deliberation, a judgment, and, oddly, a result of itself. Yet as both experience and as institution, as training ground and as learning life, and as natality and its repression, people who are both undergoing education as they are directing others in their learning rarely think the thought of education. Instead they may fall back into their knowledge and its transmission. This is one form of resistance, not to education and what happens to people as they influence one another, but to the incompleteness that education animates and disavows. (p. 2)

These ideas of teachers and instructional practices contradict current assumptions within the school atmosphere which supports the notion of developing pedagogical practices, honing instruction, and contributing to social change (Bloomfield, 2010). Although these practices are a direct reflection of the quality of training preservice teachers received in undergraduate school, they are also a reflection of teachers' current training because they are expected to continually improve and master their teaching skills throughout their career with continuous professional development (Weisberg, Sexton, Mulhern, & Keeling, 2009).

Gutman (2012) reviewed data on 2.6 million general education students in Grades 1-12 from 24,465 schools in all 50 states for the 2011 school year. Gutman discovered

that the range of reading levels was a 5.4 grade equivalent. Reis, McCoach, Little, Muller, and Kaniskan (2011) found that classrooms are increasingly heterogeneous, and educators often operate within difficult and unpredictable environments. These diverse populations pose unique challenges for educators; as the diversity among students increases, so may the differentiation of teaching methods and strategies. However, Tomlinson and Santangelo (2012) ascertained that public schools typically want educators to provide a consistent and prescribed curriculum that functions within specific boundaries and standards without individualization thus making heterogeneous classrooms composed of students with diverse learning styles a challenge for public schools.

Staff development and teacher inservice are common methods to assist teachers. The U.S. Department of Education (2013) emphasized the importance of staff development by requiring public school districts to offer opportunities for teachers to learn effective instructional strategies and increase content knowledge. Most school districts typically provide teachers with staff development, training, and workshop opportunities that explore education trends focusing on the core disciplines of reading, writing, science, and mathematics (Dunn et al., 2009; White, Syncox, Heppleston, Isaac, & Alters, 2012). White et al. (2012) suggested that these opportunities focus on content and ignore pedagogical practices discussed in teacher preparation programs; few school districts assist teachers in meeting the needs of all students in general education classrooms.

Teachers often struggle when teaching large numbers of diverse students within one classroom (Tomlinson, 2013). According to Jones (2012), even school systems fear the unknown when attempting to raise standards, improve teacher professional development, focus on student achievement, and be accountable for the results. Differentiated instruction is one encompassing methodology that is considered effective to address these issues (Hawkins, 2009; Tomlinson & Santangelo, 2012). Weisberg, Sexton, Mulhern, and Keeling, (2009) and Welch (2011) noted teachers' willingness to use differentiation as one method to meet the needs of all students and administrators' failure to provide training; administrators opt to focus solely on state standards instead of a combination of content and pedagogy. Nonetheless, without training, teachers attempt this practice resulting in inadequate differentiated instruction; this is expected as Tomlinson and Imbeau (2011) discussed differentiation as multidimensional with numerous requirements. Clark (2010) stated, "People find for themselves the most desirable method of learning strategies; therefore, teaching methodologies need to be varied" (p. 37). Clark suggested that it is not possible to explore content in isolation, but instead teachers learn differentiated instructional strategies within multiple contexts of core disciplines.

Differentiated instruction requires teachers to involve and improve student contributions within the classroom; it asks students to participate in specifically designed lessons that recognize their learning preferences within their zones of proximal development (Goddard, Neumerski, Goddard, Sallous, & Berebitsky, 2010; Vygotsky, 1978). Initially, differentiated instruction was considered to be an effective strategy to

accommodate only talented and gifted students, but Tomlinson and Santangelo (2012) suggested that these strategies are effective for all learners, regardless of student aptitude. McBee, Peters, and Waterman (2014) discussed the struggle to identify talented and gifted students within schools. These three authors concluded that most states follow a best practices approach to serve all student populations, and despite pedagogic attempts by teachers in general education environments, students identified as gifted and talented typically receive the same instructional strategies as their peers. Hawkins (2009) concluded that it is necessary to provide general education teachers with methodology that creates superior teachers in all classrooms for all students, regardless of abilities and aptitude.

The success of differentiated instructional practices as an effective methodology for teachers was established in the literature (Beecher & Sweeny, 2008; Kanevsky, 2011; Subotnikl, Olszewski-Kubilius, & Worrell, 2011; Welch, 2011). Even students encouraged the use of differentiated instructional practices in the classroom; over 70% of students who participated in Kanevsky's (2011) study wanted to be able to choose topics of interest and work in collaborative groups at individual paces, all key elements of differentiated instruction. Several authors (Kanevsky, 2011; Subotnikl, Olszewski-Kubilius, & Worrell, 2011; Welch, 2011) discussed how students process information by thinking about it before attempting the task; in addition, it was noted that students wanted teachers to provide sufficient time to complete a task. Both of these are key elements of differentiated instruction. Gavin, Casa, Firmender, and Carroll (2013) and Subotnikl et al. (2011) suggested that differentiated instruction affects gifted education programs and

how these students are educated. Watson (2011) and Welch (2011) emphasized that if differentiated instructional methods are effective for gifted and talented students, then they should be effective and used for general education students as well. Berkeley, Bender, Peaster, and Saunders (2009) and Dunn et al. (2009) inferred that appropriately implemented differentiated instructional strategies may assist academically, struggling students too.

Scholars have demonstrated that differentiated instructional strategies work for all students; yet despite this information, little direction is found in the literature to provide evidence of how teachers perceive differentiation or when they receive training on how to implement differentiated instructional strategies; furthermore, teachers may consider differentiated instruction as ineffective or challenging to implement on a day-to-day basis. So instead, teachers use grouping or integrate multiple intelligences within collaborate lessons to form a supposal differentiated classroom (Alavinia & Farhady, 2012; Hamdan & Mattarima, 2012), but key elements of differentiation discussed by Kanevsky (2011), Subotnikl et al. (2011) and Worrell (2011) are ignored, resulting in ineffective differentiated instructional practices. Dunn et al. (2009) and Walker-Dalhouse, Risko, Esworthy, Grasley, and Stephan (2010) provided data on the importance of professional development and support for educators who implement new instructional strategies, such as differentiated instruction.

There are acceptable ways to assist teachers in the learning process. Walker-Dalhouse et al. (2010) stated, “Professional development is essential when implementing any systematic change . . . classroom teachers need sustained support in their efforts to

monitor student progress and determine effectiveness of instruction" (p. 85). While training on differentiated instruction is necessary, it is not always available. School budgets are limited, and other focuses deemed more important by administrators receive higher training priorities. Teachers often receive supplemental training to implement such content programs as Singapore Math and Reading Discovery, but administrators leave little funds or time for coaching teachers to effectively use differentiation in the classroom (Daly, 2009). Furthermore, teachers' personal barriers and experiences may supersede differentiated instructional training, thus affecting the implementation of these practices even though most teachers begin their career with a positive opinion of differentiated instruction during undergraduate work prior to full-time employment; something happens within the primary years of teachers' careers causing a disparity between implementing previously learned pedagogical strategies and creating an effective classroom (Conderman & Johnston-Rodriguez, 2009; Goodnough, 2010).

There is a gap in understanding how teachers know what they know about differentiated instruction and what they do with this knowledge. This gap exemplifies innumerable definitions of the term differentiated instruction and its practices by public schools; furthermore, educators lack a general understanding on how to define differentiation and uniformly address erroneous and tireless beliefs about instruction to create positive social change within the public school system. In this study, I highlighted these experiences through a hermeneutic, phenomenological study. This gap in knowledge prevents administrators from choosing appropriate staff development opportunities for teachers who serve all students. In addition, this gap in understanding

allows teachers to continually provide curriculum choices without the complete benefits of differentiated instruction. This study was needed to improve the assumptions and essence of differentiation, administrators' staff development focuses and teachers' use of differentiation as a pedagogical practice.

Problem Statement

Even though there is research relating to the topic of differentiated instruction and its use among educators, there were few current, refereed contributions discussing how and where teachers learn about differentiation and if they were provided professional development on this strategy. Little information was known about teachers' perceptions of differentiation in the classroom. Authors of refereed literature documented the success of differentiation, but did not state the nuances of teachers' knowledge and perceptions of the strategy. The problem addressed by this study illustrated how teachers perceive differentiated instruction.

Purpose of the Study

The purpose of this hermeneutic, phenomenological study was to explore how elementary (K-5) teachers define, familiarize, use, and perceive differentiated instruction in a classroom. Although there was research relating to the topic of differentiated instruction and its use among educators, there were few current, refereed literature indicating what teachers know about differentiated instruction, if they are provided professional development about differentiated instruction, and how they perceive differentiated instruction in the classroom.

Research Questions

1. How do elementary (K-5) teachers define differentiated instruction?
2. How do elementary (K-5) teachers learn instructional strategies for differentiated instruction?
3. How do elementary (K-5) teachers implement differentiated instruction in classrooms?
4. What are the barriers to fully implement differentiated instruction?

Conceptual Framework

The concepts within current refereed literature, as well as Vygotsky's (1978) zone of proximal development (ZPD), Piaget's (1951) cognitive development, and constructivism, grounded this study. The ZPD connects what students independently accomplish on their own with what they accomplish in alliance with more proficient students; some authors included teachers within this collaboration period and thought being assisted and supported by a teacher extends student learning; the ZPD exists when students link together prior knowledge with newly acquired information (Simpkins, Mastropieri, & Scruggs, 2009; Tomlinson & Imbeau, 2011; Vygotsky, 1978). According to this concept, the teacher acts as a mediator who will provide learning opportunities slightly above students' cognitive abilities allowing academic growth and motive the students by designing lessons that consider their learning profiles (Heacox, 2012; Kanevsky, 2011; Piaget, 1951; Wadsworh, 1989).

Classroom teachers remain hesitant or unable to correctly implement differentiated instruction as an effective pedagogical practice (Alavinia & Farhady, 2012;

Florian & Black-Hawkins, 2011; Kosko & Wilkins, 2009; & Muir, Beswick, & Williamson, 2010). Many authors (e.g., Hawkins, 2009; O'Conner & Wormeli, 2011; Tomlinson, 1999; Wormeli, 2012) developed logical connections of differentiation by emphasizing constructivism theories within the content of classroom instruction and focusing on children's cognitive development according to ideas of Piaget (1951) and Vygotsky (1978). Tomlinson (1999) and Wormeli (2012) stressed that differentiated instruction is grounded in children's readiness, interests, and learning profiles and that teachers who modify curriculum according to these emotional and social needs make the greatest impact on learning. Although originally thought to benefit only talented and gifted children, additional researchers have suggested that differentiated instruction benefits all children (Jenkins, Schiller, Blackorby, Kalb-Thayler, & Tilly, 2013; Newman & Hubner, 2012; Renzulli & Renzulli, 2010). Gardner (1983) emphasized the need for children to discover learning through nine multiple intelligences; children create solutions to problems by gathering new knowledge. Although Gardner's theories did receive criticism (Ozder, 2011), they illustrated pathways for differentiated instruction within a constructionist classroom. The conceptual lens of this phenomenology allowed readers the opportunity to view differentiation through the knowledge and perspectives of the interviewees as shared in this research document.

There were connections between the ideas found in current, refereed literature, students' ZPD, as well as the educational concepts of Piaget (1951) and Vygotsky (1978). These concepts form the building blocks of differentiated instruction by providing an understanding of how children learn in classroom environments. I explored additional

relationships among key conceptual elements in Chapter 2 of this study. The authors' ideas that compose this conceptual framework focus on pedagogical practices that result in optimum student learning through differentiated instruction. In this study, I examined how teachers experience differentiation; phenomenology was the best qualitative research approach to examine this phenomena. Qualitative data were critical to understand how elementary (K-5) teachers define differentiated instruction, how they learn differentiation strategies, how they implement differentiated instruction in the classroom, and what barriers exist in the implementation process.

Nature of the Study

The rationale for selecting phenomenology as a qualitative research approach was my desire to explore how elementary (K-5) teachers perceived differentiated instruction and described their experiences; I explored the phenomenon of differentiation and included an analysis of phenomena (i.e., what individuals experience). No other qualitative approach provides a research purpose of describing individuals' experiences within an occurrence (Johnson & Christensen, 2012) as discussed in the limitations section of this chapter. By exploring the research questions in context, the justification and principal reason of using a phenomenological approach may be developing acceptable descriptions, interpretations, and explanations of this study (Maxwell, 2013). Because the goals of this study focus on describing how these southwest teachers define and use differentiated instruction through interviews and focus groups, only a phenomenology is the best approach to discover and illustrate such pedagogical experiences.

The major concepts considered within this hermeneutic, phenomenological study were teachers' perceptions, including their knowledge and experiences, with differentiation. By discussing experiences, participants were able to illustrate knowledge, implementation, perceptions, and barriers of differentiated instruction. By using Heidegger's (1927) model of hermeneutic, phenomenology this research was interpretive and composed of significant meanings and experiences from each participant and unlike Husserl's (Heidegger, 1927) description of phenomenology as a progression of systematic, logical experiences. The participants of this study shared their perceptions of differentiated instruction and the processes of how they learned and implemented differentiated instructional strategies in the classroom through random experiences.

Summarization of Methodology

Although the rationale for sample sizes within qualitative research varies from author to author, there were consistent themes of purpose, privacy, and process within the literature; study objectives may determine sample sizes (Johnson & Christensen, 2012; Maxwell, 2013; Merriam, 2009; Miles & Huberman, 1994; Patton, 2002). Qualitative sample sizes are typically determined by the research question, qualitative approach, and methodology of the design (Maxwell, 2013). Johnson and Christensen (2012) discussed that qualitative sampling evolves as a continual progress vulnerable to change even though initial sampling definitions are still essential. Maxwell (2013) suggested that, unlike quantitative probability or convenience sampling that defines superior research, qualitative sampling is a purposeful selection; this purposeful sampling chooses

participants, environments, or events that intentionally offer information unattainable from other sources. Such is the case with phenomenology.

I introduced the study during a morning faculty meeting and described its voluntary nature; in addition, I answered questions about the study from the faculty and directed individuals wishing to participate to call or text me on my personal, private mobile telephone; this telephone number was written on the Smart Board. I set a deadline of 72 hours to accept volunteers for this study. When individuals called or texted me, I established a time to meet to review the consent form. Current Concordia University (CU) students, where I teach, would have been asked to not volunteer; but the principal confirmed no one is a current CU student and I did not have any CU students as volunteers. The sample size for this hermeneutic, phenomenological study was 12 teachers: seven participated in one-on-one interviews and five participated in a focus group. I also asked for five alternate teachers. If too few participants would have occurred I had permission from the assessment, accountability, research, and school improvement offices of the school district to contact other principals for an alternate study site of my choice. This would have required me to request a change with the Institutional Review Board of Walden University through the submission of the Request for Change in Procedures form. This did not occur. Choosing to interview 12 teachers provided information unattainable from other sources; Patton (2002) concluded that it is better to comprise small sample sizes and go into more depth with participants. Consent agreement forms were signed and returned prior to the commencement of the study.

Data were collected through interviews using a digital, audio recording devise; I transcribed each individual interview, as well as the focus group interview. Initially I used open coding to analyze the data reducing, "the statements to the common core or essence of the experience as described by the research participants" (Johnson & Christensen, 2012, p. 398; Appendix L). Noteworthy, descriptive statements – a word, phrase, or sentence – that provided insight to differentiated instruction were compiled into categorized lists. By examining and marking all of the content, I was able to explore the relationships among responses. Next I used axial coding by exploring how the relationships of categories and responses related to each other; I made connections between the responses (Appendix L). Reoccurring themes and repetitive knowledge about differentiation described the experiences of the participants. Finally, I used selective coding to identify a single category which builds the core of the phenomenon. Even though a hermeneutic, interpretative process to analyze the data was used, I verified the 12 participants' knowledge using Johnson and Christensen's (2012) member checking technique which allows a review of transcripts and summaries by the participants checking for accuracy. Pseudonyms were used to maintain confidentiality of the teachers. A narrative report provided the final review of this study (Appendix M).

Definitions

A relevant list of definitions is provided below to aide in understanding the content of this dissertation; although many terms are familiar with educators, there are diverse and multiple meanings of these words that may create confusion. Therefore, a

glossary is provided to allow the reader to focus on specific content and isolate a specific understanding for differentiated instruction.

Ability grouping: Grouping students together according to academic abilities and talents within the same classroom (i.e., tracking students; Hamdan & Mattarima, 2012).

Core curriculum: The typical student courses of reading, writing, mathematics, and science required by school districts (Crepeau-Hobson & Bianco, 2013).

Differentiated instruction: "A systematic way to conceptualize the process of teaching and learning such that each student's learning needs are honored and, consequently, each student's learning potential and outcomes are maximized" (Tomlinson & Santangelo, 2012, p. 312).

Disposition: The tendency of teachers to react in a certain manner based on experiences in talented and gifted or general education classrooms (Bleaker & Boakes, 2010).

Diverse and heterogeneity populations: Students with dissimilar cultural, linguistic, racial, religious backgrounds, family structures, socioeconomic status, or ability levels (Tomlinson, 2013).

Expert teachers: Content validity is measured as an agreement among experts. Because all participants were licensed educators within this study, they were considered experts (Shultz, Whitney, & Zickar, 2013).

Growth mindset: An understanding that basic abilities and intelligences can be developed; teachers collaborate and focus on content rather than knowledge (Tomlinson & Imbeau, 2011).

Highly effective: A personal characteristic that goes beyond teachers' contribution to student learning and includes how teachers impact classrooms, schools, colleagues, and parents (Welch, 2011).

Highly qualified: A teacher must hold a teaching license, in the appropriate area, and have successfully completed the following: the Pre-Professional Skills Test (PPST), The Principles of Learning and Teaching (PLT) test, and The Specialty Area test (Department of Education, 2014).

Member checking: A review of transcripts and summaries by the participants checking for accuracy (Johnson & Christensen, 2012).

Preservice teachers: University adults participating in culminating educational activities while studying to become a licensed teacher within the United States (Ng, Nicolas, & Williams, 2010).

Response to Intervention (RtI): A three tier model of school supports that uses research based academic and/or behavioral interventions. The three tiers include: high quality classroom instruction and screening; group and targeted interventions; and intensive interventions and comprehensive evaluations (Crepeau-Hobson & Bianco, 2012).

Scaffolding: Teacher-provided support to assist students' learning processes within a classroom (e.g., supplies, materials, templates, guidelines, rubrics, models, and coaching; Pentimonti & Justice, 2009).

School wide enrichment model (SEM): A teacher-designed curriculum that focuses on students' academic and creative abilities according to their talent portfolio, individualized instruction, and enrichment opportunities (Renzulli & Renzulli, 2010).

Teach up: Teachers' ability to provide clear directions with definable goals for assignments that require students to analyze, synthesize, and reflect on core curriculum supported by scaffolding (Sousa & Tomlinson, 2011).

Assumptions

I made the assumption that teachers were familiar with the term differentiated instruction because all teachers at the study site were designated highly qualified by the U.S. Government (Department of Education, 2014). I also assumed that teachers who volunteered for this study were capable of discussing their experiences of differentiation regardless of age, health, and conditions. I made the assumption that teachers would be honest within the interviews or focus group activities and provide real life examples from their own classrooms while discussing differentiation within these oral formats.

Other assumptions that may be understood, but not validated, included the following: volunteer teachers as participants would readily share information through dialogue about differentiation during the data collection process, and because I did not know the participants, I should not have had a professional influence on the teachers of this study site. Teacher obligation to participate was voluntary and no compensation of any kind was provided. These assumptions were necessary because this study involved purposeful sampling. I assumed teachers as participants were willing to assist me, as well as confidentially contribute to a study on differentiation.

Scope and Delimitations

By collecting data through interviews for this hermeneutic, phenomenological study teachers, were able to express their knowledge and personal experiences with differentiation; phenomenology allowed the teachers to share lived experiences from their classrooms (Pereira, 2012). All teachers who participated were from an elementary school located in one of the 20 largest school districts in the United States. Teaching experience, ability level, content knowledge, and understanding of differentiation varied within the study location. The scope of the study was limited only to teachers at this one school. All participants were volunteers. The data collection process involved interviews, either one-on-one or participation in a focus group.

In this study, I examined the knowledge, use, perceptions, and viewpoints of classroom teachers and differentiated instruction; therefore, even though students may have strong opinions about their personal learning processes, the boundary of delimitation set for this study included a focus on teachers only. All peer-reviewed considerations were accepted for studying literature that focused on the following: differentiated instruction, individualized instruction, learning differences, learning variances, teacher perception, and teacher training. The focus of this study remained on elementary (K-5) teachers because differentiation typically begins at the primary grades. Additional boundaries of the study included a focus on authors only within the education discipline; although the concepts and ideas from other professions (e.g., business, medical, or law) could be beneficial to differentiation, only education-related research was included in this study. Transferability may cause teachers who review this research

to consider their own personal experiences with differentiated instruction; this alone may be a motivation to elicit social change.

Limitations

There were commonalities with the chosen research approach and the concept of differentiated instruction – phenomenology and differentiation both relate to how the world appears to an individual based on his or her own experiences (Chiari & Nuzzo, 1996). These similarities may limit the depth of the study because I only examined the descriptive experiences of teachers and did not go in-depth exploring a teacher's lesson plan book or student records; I also did not observe classes or district wide staff development activities as would be possible with the different research questions of a case study or grounded theory. I did not try to explain the actions of the participants to form theory as in a grounded theory approach. A case study does not concern itself with phenomena, so much, but would describe teachers' knowledge using lesson plan books, observations, as well as interviews. Phenomenology also requires the participants to be conscious of their "lived experiences" (Johnson & Christensen, 2012, p. 395). Some participants may not have had sufficient intrapersonal skills and be unable to communicate what differentiation means to them; to assist these participants, I restated interview questions and follow-up questions occurred, as necessary.

Limitations to qualitative research exist. Miles and Huberman (1994) suggested that one limitation of qualitative research was sampling; participants who are within classrooms, institutions, and districts are theoretically driven by conceptual questions and may be limited by the open-ended questions and focus groups of phenomenology.

Kanevsky (2011) suggested limitations of research include students completing surveys without truly understanding the questions and their effort to please adults; this could also be true with a study that involves interviews. Likewise, teachers could have responded to interview questions without completely understanding the questions or compose untrue information to please myself or their colleagues; the study relied on participants to provide honest and reliable data, which was emphasized at the beginning of each interview. Teachers may have performed for the observer by discussing false activities or implemented strategies that, in reality, did not occur in their classrooms. This fabricated data would produce unforeseen limitations during the process.

Other limitations included omitting current Concordia University students, the culture of a proven school, and the established relationships of the teachers; often school communities strive for a cohesive environment and may resist the presence of open-ended interviews and focus group activities of outsiders (Greenfield Rinaldi, Proctor, & Cardarelli, 2010). In addition, the school district has a large Hispanic student population and a diverse employment population; this may limit the generalizability of other similar studies on differentiation. It also may provide teacher viewpoints that differentiated instruction is too easy or too challenging to implement. Transferability may be limited to K-5 teachers because this study occurred in an elementary school and dependability was limited to the honesty of the participants.

The term bracketing was used by existential phenomenologists as a method for researchers to remove personal prejudices and perceptions from the study process; this also involves the void of judgments from the interviewer (Moustakas, 1994). Bracketing

would not assist me in addressing study outcomes throughout this process. A hermeneutic and transcendental phenomenologist would suggest removing interviewer biases and this was not possible, which is considered a limitation of the study (Pereria, 2012).

Other limitations were addressed during the research process by using an audit trail and member checking (Johnson & Christensen, 2012). An audit trail was a clear outline of the steps taken from the beginning of the research project to the analysis and reporting of findings at the end of the study. Member checking, as discussed in Chapter 3, allowed the participants access to summaries and transcripts, before final reports were written, to check for accuracy. Pseudonyms were used. Miles and Huberman (1994) suggested discussing and examining all data to assure it counts towards the analysis process. The research process was consistent, without variations from participant to participant; Patton (2002) stated, "Qualitative inquiry within this tradition emphasizes procedures for minimizing investigator bias" (p. 545).

Significance

Differentiated instruction is considered a pedagogical methodology that stresses the teaching of concepts rather than facts; in Chapter 2, researchers (Gage, Lierheimer, & Goran, 2012; Jenkins, Schiller, Blackorby, Kalb-Thayler, & Tilly, 2013; Kanevsky, 2011; Newman & Hubner, 2012; Renzulli & Renzulli, 2010; Subotnikl, Olszewski-Kubilius, & Worrell, 2011; Welch, 2011) demonstrated how differentiation helps students meet academic standards when successfully used by general, gifted, and special education teachers. However, there were insufficient studies on how teachers perceive differentiation. In addition, there was not a universal definition for the term differentiated

instruction. Numerous authors (Fahsl & McAndrews; Hamdan & Mattarima, 2012; Walker-Dalhouse et al., 2010; Welsh, 2011) provided different explanations and practices by public schools. This study may provide positive contributions to advance information about differentiation for all educators by providing a consistent definition of the term differentiation. In addition, participants provided personal viewpoints regarding differentiated instruction guiding policies and future staff development opportunities on the topic. This study may also contribute to the existing framework of defining differentiation. Participant knowledge of differentiation may also illicit future studies at varied grade levels. In addition, it could illustrate how more emphasis needs to be placed on teacher training and preparedness and direct local administrators and superintendents to focus future teacher in-service and staff development funds towards the creation of differentiated classroom training. If teachers' knowledge, usage, and challenges on differentiated instruction are studied, then these ideas could be reviewed in all school districts and generate multiple and diverse learning opportunities for all students. Potential contributions of the study are relevant to all teachers; the significance of this study lies in the belief, practice, and nature of what teachers know about differentiated instruction and how they implement it in the classroom.

Education is about helping all students; this study is important to all students, parents, teachers, administrators, and superintendents who care about the wellbeing of children and who want them to succeed. Potential implications for social change are rooted in the significance of the study – a group of 12 teachers describing their experiences with differentiated instruction. These participants enlighten other educators

to be reflective and examine their own pedagogical practices. Because differentiated instruction is about teachers designing interactions, lessons, and opportunities throughout the school day that meet students' personal needs, students will be better prepared to make a difference in their world. This study will narrow gaps in the literature about teacher perceptions of differentiated instruction and its usefulness to classroom instruction.

Summary

I began Chapter 1 with an introduction of the study and an in-depth background review. A definition of differentiated instruction was provided and the current paradox within classrooms was explained; teachers' willingness to use differentiation and administrators' failure to provide training on this technique were noted. In the problem statement and purpose of the study, I identified a void in current research regarding teachers' personal experiences and perceptions with differentiated instruction and explained the research focus; in this hermeneutic, phenomenological study I explored how elementary (K-5) teachers defined differentiated instruction, how teachers learned instructional strategies for differentiation, how teachers implemented differentiated instructional strategies in the classroom, and the barriers to fully implement differentiated instruction. Although there was a great amount of research relating to the topic of differentiated instruction and its use among educators, there were few refereed contributions indicating how teachers define, familiarize, use, and perceive differentiated instruction in an elementary (K-5) classroom.

Current refereed research provided a foundation for the conceptual framework; the nature of the study included the hermeneutic, phenomenological design and a summarization of methodology and sample sizes. The definitions section provided clarity of words with multiple meanings relevant to this study. Assumptions, scope and delimitations, and limitations explored the boundaries and challenges of the study; practical methods to address limitations are included. The final section of Chapter 1 was the significance of the study; within this section I provided examples of potential, positive contributions for elementary teachers within this school and district.

In Chapter 2, I will review the literature search strategy and explain the conceptual framework in greater detail. In addition, I will identify sources, describe theory, provide instructional strategies and examples of implementation, and synthesize studies relevant to differentiation.

Chapter 2: Literature Review

Introduction

The purpose of this hermeneutic, phenomenological study was to explore how elementary (K-5) teachers perceived differentiated instruction, how they defined differentiation, if they were provided professional development about differentiation, how they implemented differentiated instructional strategies in the classroom, and what barriers were related to differentiation instruction. I begin Chapter 2 with a discussion of the literature search strategy and continue with an examination of the conceptual framework that focuses on a review of refereed literature that is organized to address three key areas: first, a foundation of differentiated instruction is provided by defining its history, objectives, and principles. Second, the implementation of differentiated instruction is examined as an instructional strategy for teachers. Finally, the concepts of differentiation are explored in relation to students and teachers. Barriers are also discussed according to the availability in refereed literature.

After examining these key areas, common themes emerged, such as how differentiation benefits all students, teacher responsibilities in providing student-centered instruction, an absence of any guidelines within refereed journals on how to learn about differentiated instruction, and effective pedagogical strategies.

In Chapter 2, I explore the ideas that differentiated instruction is a successful pedagogical strategy that stresses diversity and flexibility in curriculum development and the implementation of lessons for all students; within the literature, there is a lack in

understanding what teachers know about differentiation and how they receive training for this instructional strategy.

Literature Search Strategy

To discover literature on the topic of differentiated instruction, I conducted an exhaustive search by topic using the Walden University library website (http://library.waldenu.edu/), Google Scholar, and the District of Columbia Public Library. The education data bases used were (a) Education Resource Information Center (ERIC), (b) Education Research Complete, (c) Education from SAGE, (d) ProQuest Central, and (e) Questia. An initial search revealed these databases and key terms of *differentiated instruction, teacher perceptions,* and *teacher training*. Established perimeters consisted of peer-reviewed journals for all educators at any educational level, all publication types, and all journals and documents. Please note Education from SAGE contained only peer-reviewed journals.

Next, subsequent searches occurred implementing the thesaurus feature of ERIC and Education Research Complete instead of the search toolbar; within these thesauruses, *differentiated instruction* was used with the perimeter of relevancy ranked. The terms *individualized instruction, teacher attitudes, politics of education,* i*nquiry-based education,* and *teacher responses* were discovered and added to *differentiated instruction, teacher perceptions,* and *teacher training* for another search. Established search perimeters remained the same to identify studies. A third search was conducted using the multidisciplinary database Academic Search Complete using previously noted perimeters yielding additional studies. Furthermore, reference lists and textbooks were used to

discover information on this topic. Two Walden University reference librarians minimally assisted with the literature search strategy.

Once initial examinations of the literature occurred, two authors provided search strategies that were also implemented; Goddard (2010) suggested using the term *teacher perceptions* and avoiding the term *differentiated instruction* because it is typically misunderstood, and Tomlinson (2013) encouraged using the terms *individualized education*, *learning differences*, and *learning variance* as alternatives to *differentiated instruction*. Authors such as Tomlinson, Goodnough, Fahsl, Gage, and Watson repeatedly occurred in searches for this study.

Conceptual Framework

The concepts within current, refereed literature, as well as Vygotsky's (1978) ZPD, Piaget's (1951) cognitive development, and constructivism, grounded this study. The ZPD connects what students independently accomplish on their own with what they accomplish in alliance with more proficient students; some authors included teachers within this collaboration period and thought being assisted and supported by a teacher extends student learning (White et al., 2012); the ZPD exists when students link together prior knowledge with newly acquired information (Vygotsky, 1978). According to this concept, the teacher acts as a mediator who will provide learning opportunities slightly above students' cognitive abilities allowing academic growth and motivating the students by designing lessons that consider their learning profiles (Simpkins et al., 2009). Differentiated instruction is a pedagogical methodology that provides access to students' ZPD.

There are many humanistic theorists whose ideas relate to differentiated instruction (Dewey, 1997; Knowles, 1970; Maslow, 1970; Rogers, 1983); however, in the conceptual foundation of this study, I focused on the beliefs of Piaget (1951) and Vygotsky (1978) and how classrooms function best as constructionist environments. According to Piaget's (1978) theory of constructivism, individuals learn through interactions with their surroundings and build schema throughout each stage of life. In the theory of constructivism, Vygotsky (1978) emphasized how children develop within a context of collaboration and socialization. In addition, contemporary theories from Tomlinson (1999) and Gardner (1983) contributed to the theoretical foundation and the exploration of differentiated instruction.

An individual's learning role is debated throughout time. Piaget (1951) believed that emphasis is placed upon the student, rather than the teacher, in the primary learning role; according to Piaget, children learn by responding to mental and physical experiences. Over time, as the exposure and complexity level of events increase, so do the children's cognitive skills. Schemata to these events accumulate and development occurs (Nie & Lau, 2010; Wadsworth, 1989). Throughout adolescence, children continue to organize information and interact with concepts and events thereby gaining understanding; they construct their own answers and solutions to questions (Nie & Lau, 2010). In the constructivism theory, Piaget (1978) focused on individual leaners who develop meaning from social environments; it was these continuous interactions within environments where understanding occurred. Piaget framed the constructionist theory using concepts from children's psychological development; Piaget (1951) viewed the

formal operational stage, after 11 years of age, when abstract thinking begins and children start thinking about probabilities, associations, and analogies between individuals and environments. In addition, the developmental theory of learning and constructivism were based on discovery. Wadsworth (1989) believed that students would benefit from differentiated classrooms that promoted students' abilities to construct meaningful knowledge. Piaget (1951) promoted environments where individual differences are honored and cognitive learning experiences with hands-on opportunities that exaggerate the human senses are the focus of lessons. This is a constructionist classroom.

Other theorists possessed developmental views. Vygotsky (1978) was also a constructivist and best known for a sociocultural approach to human development, a set of ideas about how children's social worlds and cultures affect development; Vygotsky believed that learning and development were collaborative actions and that children developed through social activities. Vygotsky asserted that the role of the educator must include providing children with challenging experiences within their grasp and understanding, thereby advancing individual knowledge; learning occurs when children interact in a social environment and are able to internalize the experience. The children's interpersonal activities allow them to construct new ideas. Vygotsky defined the ZPD as "the distance between the actual development of a child as determined by the independent problem solving, and the level of potential development as determined through problem solving under adult guidance or in collaboration with more peers" (p. 57); cognitive development is limited to a certain range at a particular age.

With the help of social interaction, such as assistance from teachers, children may comprehend concepts and schemes that they cannot understand on their own. Therefore, teachers benefit the most when using the ZPD as a guiding reference when developing curriculum activities for a differentiated classroom. Vygotsky (1978) stated, "Learning should be matched in some manner with the child's developmental level" (p. 85). Teachers provide an overabundance of guidance and support according to the children's needs within a constructionist classroom (Vygotsky, 1978). Piaget (1978) and Vygotsky valued the need for children to form evidence and internalize meaning instead of children accepting knowledge through rote-memory. Constructivism theorists encourage children to collect, sort, evaluate, and reflect on knowledge producing individualized comprehension and private learning. Piaget and Vygotsky defined constructivism theory through psychological and social aspects; these theorists formed the building blocks of differentiated instruction by providing an understanding of how children learn in classroom environments.

Contemporary theorist Tomlinson (1999) emphasized constructivism theory within the content of differentiated instruction and focused on children's psychological development according to Piaget (1951) and social development according to Vygotsky (1978). Tomlinson stressed that differentiated instruction is grounded in children's readiness, interests, and learning profiles and that instruction is best when teachers modify curriculum according to the emotional and social needs of all children. Although originally thought to benefit only talented and gifted children, research suggested differentiated instruction benefits all children (Renzulli & Renzulli, 2010; Newman &

Hubner, 2012; Jenkins, Schiller, Blackorby, Kalb-Thayler, & Tilly, 2013). Gardner (1983) expressed his constructionist view through intelligences by emphasizing the need for children to discover learning through nine multiple intelligences; children created solutions to problems by gathering new knowledge. Although Gardner's theories did receive criticism (Ozder, 2011), they illustrated pathways for differentiated instruction within a constructionist classroom.

Key statements inherent to differentiation include the constructionist views of Piaget, Vygotsky, and Tomlinson because they validated the purpose of this research (Maxwell, 2013). In addition, Tomlinson and Santangelo (2012) used theories to define effective instructional strategies of differentiated classrooms while Gardner (1983) considered Piaget's and Vygotsky's theory as a way to view intelligence. Gardner modeled his theory in curriculum that focused on the multiple intelligences of children and provided additional frameworks to explore differentiated instruction (Watson, 2011; Saez et al., 2012; & Pillay, 2009). Gardner was criticized for not going in depth and adding information about students' individual learning profiles (Pillay, 2009; Sousa & Tomlinson, 2011).

The phenomenon of differentiation in previous research typically related to its effectiveness and strategies; but such research did not discuss teachers' knowledge of differentiated instruction or how they learned about differentiation. Classroom teachers remain hesitant to implement differentiated instruction as an instructional practice (Alavinia & Farhady, 2012; Kosko & Wilkins, 2009; Muir et al., 2010; & Florian &Black-Hawkins, 2011). A hermeneutic, phenomenological study was chosen as the

approach in this qualitative study to explore how teachers define, familiarize, use, and perceive differentiated instruction in an elementary (K-5) classroom. The teachers within this study discussed knowledge, implementation, and barriers when assessing the pedagogical techniques of differentiated instruction. By exploring the research questions in context, I justified the principal reason of using a hermeneutic, phenomenological study because it allowed participants the autonomy to experience differentiation from an established framework in literature at an unintentional level. In other words, the experiences of highly qualified teachers as participants, along with carefully constructed interview questions from existing, refereed literature provide benefits to this study. Transferability among teachers may occur when reviewing this study. A hermeneutic, phenomenological study was the best approach to explore how teachers experience the phenomenon of differentiation.

In addition, this current study benefited from previous research by using Heidegger's (1927) model of an interpretative, hermeneutic phenomenology and examining Husserl's (Husserl & Moran, 2012) beliefs. Theory influences data collection and data analysis by providing examples of experiences and outcomes; Creswell (2012) stated that theory in qualitative research, "becomes an advocacy perspective that shapes the types of questions asked, inform how data are collected and analyzed, and provides a call for action or change" (p.62). Theory will influence the data collection of this study by identifying examples and non-examples of elementary teachers who create a constructionist classroom as defined by Piaget (1951) and Vygotsky (1978). According to Creswell (2012), the objective of qualitative researchers was to attain an overall

understanding of the condition studied, rather than recording the existence of specific, easily verified dimensions or characteristics of the circumstance. Finally, this study benefited from previous research by requiring teachers to redefine and rethink current life-world experiences in refereed literature and acknowledge a commonality in human experiences, an essence, from all participants (Johnson & Christensen, 2012).

Literature Review

Defining Differentiated Instruction

History of Differentiated Instruction

I examined studies that related to differentiated instruction and included an emphasis of its effectiveness as a teaching strategy (Beecher & Sweeny, 2008; Kanevsky, 2011; Subotnikl, Olszewski-Kubilius, & Worrell, 2011; Welch, 2011; Renzulli & Renzulli, 2010; Newman & Hubner, 2012; Jenkins, Schiller, Blackorby, Kalb-Thayler, & Tilly, 2013). Some authors even advocated its use by exploring students' requests for differentiated instruction through flexibility and individual lessons; for example, Kanevsky studied 646 students and found over 70% of the student participants wanted to be able to choose topics of interest and collaborative groups while working at individual paces, all key elements of differentiated instruction. Berkeley et al. (2009) discovered that participants of a Response to Intervention (RtI) program requested supplemental differentiated instruction in parent conferences because it appeared to assist academically, struggling students too. Goddard (2010) called differentiated instruction, "Academically responsive instruction" (p. 342).

In *A Room With a Differentiated View: How to Service All Children as Individual Learners*, Yatvin (2004) discussed how an eighteenth century, French philosopher's novel evolved into an instructional methodology and pedagogy known today as differentiated instruction. Rousseau's (2003) treatise, *Émile*, was a phenomenological outline of a fictional character's life as well as his journey through an extremely rigid, yet individualized, model of education that eliminated commonly accepted ideologies of the time (Yatvin, 2004). Rousseau believed education occurred according to stages of life and divided *Émile* into five corresponding chapters: Book First – Émile's infancy, the age of nature, Book Second – Émile from ages 5 to 12, exploration and interests, Book Third – Émile from ages 12 to15, adolescence and abilities, Book Fourth – Émile from ages 15 to 20, individualized education, and Book Fifth – Émile and a woman, Sophie. Although numerous philosophers preceded Rousseau, this 1762 novel is one of the first documented considerations of personalized education that focuses on meeting individual learning needs. In addition, numerous logicians followed Rousseau and built upon his work. One such philosopher is Dewey (1997); he integrated his progressive philosophies with Rousseau and emphasized that children learn when actively involved in meaningful tasks; their notions had little impact during the early twentieth century.

However, as education progressed in the late 1950's and schools focused more on students preparing, producing, and problem solving, the typical pedagogical strategies of whole classroom instruction became less common (Yatvin, 2004). Teachers began to divide students into groups based solely on perceived academic abilities but did not consider students' gender, interests, and learning styles; later, authentic differentiated

classrooms occurred in the United States during the mid-1960's when architects designed schools without interior walls modeled after British schools from the World War II era (Cuban, 2004). These open-classroom school concepts allowed flexible student collaboration groups and individualized instruction. During the 1970's, constructivism philosophies emphasized whole language instruction; an indirect effect of a whole language teaching approach was the exploration of differentiated instructional strategies. In the 1980's new theories and practices related to differentiated instruction began to appear; Gardner's (1999) multiple intelligences, integrated curriculum, learning styles, and inclusive classrooms began to influence education practices. In addition, special and talented and gifted education programs matured and teachers saw value in differentiated instruction (Yatvin, 2004).

Today, some teachers use student-centered instruction that encompasses multiple intelligences and learning styles with accountability, collaboration, economies, environments, individuality, and differentiated instruction to accomplish high student achievement (Harris & Brown, 2009; Printy, Marks, & Bowers, 2009; Alavinia & Farhady, 2012).

Objectives of Differentiated Instruction

Several studies noted that differentiated instruction is not consistently implemented in today's classrooms (Pham, 2012; Hillier, 2011; Muir et al., 2010; Swicord, Chancey, & Bruce-Davis, 2013). Differentiated instruction requires teachers to improve student contributions within the classroom; it asks teachers to create specifically-designed lessons that recognize students' learning preferences within their

zones of proximal development (Kanevsky, 2011). These lessons contain comprehensible learning objectives allowing students opportunities to brainstorm and organize content prior to learning explorations and work best according to Hillocks' (1984) meta-analysis of teaching composition. Hillier (2011) stated,

> Differentiated instruction is not a rote procedure with sequential steps and a prescribed student end product. It is a process that recognizes each teacher is unique as the students and is shaped by the trails and errors of everyday classroom experiences. (p. 53)

One objective of differentiated instruction focused on relationships between teachers and students. Teachers generate lessons plans that consider students' individual academic abilities, interests, and skills (Goddard, 2010; Reis et al., 2011). Differentiated classrooms allow students the freedom to progress through academic appropriate curriculum and problem-solving activities at an individual pace using specific learning preferences. Differentiated instruction commonly guarantees that all students participate in a personalized and relevant curriculum as well as interact with diverse peers with an ultimate goal of high achievement (Reis et al., 2011; Renzulli, & Renzulli, 2010; Chamberlin & Powers, 2010).

A result of collaboration between teachers and students is student achievement. Authors emphasized how differentiated academic programs produced higher test scores for students at two schools when compared with similar schools that promote textbook academia programs; results were constant from additional studies with consistent variables (Park & Oliver, 2009; Reis et al., 2011; Alavinia, & Farhady, 2012; Cramer,

Liston, Nevin, & Thousand, 2012). Ultimately, differentiated instruction involves, "Doing whatever it takes to ensure that struggling and advanced learners, students with varied cultural heritages, and children with different background experiences all grow as much as they possibly can each day, each week, and throughout the year" (Tomlinson, personal communication, March 22, 2013).

Principles of Differentiated Instruction

Even though the concept of differentiated instruction can be indefinite, there were six guiding principles throughout the literature; authors emphasized these common themes for teachers to follow (Manning, 2010; Reis et al., 2011; Tomlinson, 2013; Hamdan & Mattarima, 2012; Reeves & Stanford, 2009; Hertberg-Davis, 2009):

- Know and understand the students
- Create a comfortable learning environment
- Provide proactive not reactive curriculum
- Maintain high student expectations
- Vary assessment
- Share responsibilities

Know and understand the students. In order for teachers to use differentiated instruction, they must know their students (Manning, 2010); Manning (2010) believed that students benefit the most when teachers maintain heterogeneous grouping and focus on the entire class of students rather than a subgroup within the classroom. Reis et al. (2011) validated this viewpoint through reading lessons that focused on enhanced

approaches and less on whole group instruction; differentiated lessons were as effective, and typically more effective, than typical textbook and lecture approaches. It is also important for teachers to build a sense of community by listening to students and respond with compassionate senses. Knowing and understanding students require fairness and equity; by developing these traits, teachers will get to know their students and identify learning experiences that focus on individual development (Walpole, McKenna, Uribe-Zarain, & Lamintina, 2010; Hertberg-Davis, 2009). Cooperative learning groups are commonly applauded for being successful in today's schools (Walpole et al., 2010; Hamdan & Mattarima, 2012; Keeley, Furr, & Buskist, 2010). These groups are typically created according to preassessment data. The effectiveness of knowing and understanding students is repetitively recognized by different authors (Manning, 2010; Muir et al., 2010; Roe, 2010).

Create a comfortable learning environment. Administrators and classroom teachers are responsible for the atmosphere with a school; their knowledge and mindset provide the foundation of student learning and balanced success (Blecker & Boakes, 2010; Daly, 2009). Students' efforts are an insight to their success (Reeves & Stanford, 2009).

Provide proactive not reactive curriculum. Curriculum defines student prior knowledge, knowledge work learning, and learning worth mastering; differentiated instruction keeps the scales of effort and success balanced for all students (Santau, Maerten-Rivera, & Huggins, 2011;Tomlinson, 2012). Differentiated instruction emphases a belief that there is diversity within student grouping regardless the task and teachers

adjust students' learning experiences accordingly. Curriculum choice does not equal differentiated instruction; instead, teachers need to differentiate instruction through content, process, and product and affect the classroom by student readiness, interests, and learning profiles (Weisberg, Sexton, Mulhern, & Keeling, 2009 & Hertberg-Davis, 2009). By providing choices, teachers are encouraging reluctant students to participate in the learning process.

Differentiated curriculum does the following (Tomlinson, 2013):

1. Plans student engagement throughout the lesson.
2. Provides opportunities for pretest assessments.
3. Proposes effective methods for students to know, understand, and do lesson content.
4. Promotes teaching up with high student expectations.
5. Prepares students for posttests.

Maintain high student expectations. Dweck, Davidson, Nelson, & Bradley (1978) explored theory that some children adopt a view of helplessness once experiencing failure in a situation that was out of their control and there was nothing they could do about it. Dweck et al. (1978) suggested focusing students' attention on the goal of learning rather than showing how well they can perform had beneficial effects in combating helplessness. Ernest, Heckman, Thomspon, Hull, and Carter (2011), Thoonen, Sleegersb, Peetsmaa, and Oort (2011), and Rubie-Davies (2010) discussed how students' motivation to learn was directly related to the teachers' sense of self-efficacy; and if the teachers possessed a positive attitude and promoted differentiated instruction assuring

that the right student gets the right learning task at the right time, helplessness was not an issue. Once the teacher had a sense of what each student understood differentiation became a repetitive response (Thoonen et al., 2011 and Rubie-Davies, 2010). Tomlinson (1999) believed it is teachers' responsibility to devote themselves to teaching and not test prep; Tomlinson believed teachers are obligated to provide curriculum that is for all students allowing high expectations that incorporates students' interests and challenges; effective teachers need to maintain a growth mindset (Manning, Stanford, & Reeves, 2010).

Vary assessment. Assessment provides the teachers with a gage to properly guide effective differentiation during the learning process. Tomlinson (2013) believed differentiated instruction is grounded in assessments because differentiation is based on students' interests, learning modalities, profiles, and abilities; she believed assessment is part of the teaching process that naturally evolves into curriculum rather than a way to measure student learning. Assessment requires effective teaching strategies that take many forms (Berg & Wehby, 2013; Burton & Pace, 2009). For example, writing prompts, graphic organizers, and learning centers provide opportunities for assessment other than the typical paper and pencil quiz. In addition, assessment does not always have to be a paper and pencil task; students are able to demonstrate knowledge through products, interviews, surveys, and mentoring. Assessment occurs throughout the school day.

Share responsibilities. The classroom teacher cannot serve all students without support from superintendents, administrators, community leaders, and parents. Clark

(personal communication, July 15, 2013) stated, "At the Ron Clark Academy in Atlanta, GA, we try to focus on partnerships and relationships with the community. We push ourselves to be different and come up with opportunities for our students like the amazing shake." Clark discussed the amazing shake as an opportunity for students to be interviewed by local community leaders. After a brief exchange, students are ranked according to their handshake, firmness, confidence, poise, engagement, appearance, and je ne sais quoi. The top 14 students are named and travel to Kimberly Clarke Professional engaging company executives for 30 minutes in a conference hall; then the top eight students are named and travel to Delta Airlines for personal interviews. Next, the top five students are named and visit the Coca-Cola Corporation where they make a 2 minute presentation on an undisclosed topic; the final two students are taken to the Commerce Club, dining with a top Atlanta community leader. At the end of the meal, a winner is chosen by the leader (Clark, 2013). Teachers involve community leaders in the local school's learning process (Willard & Hodges-Kulinna, 2012; Conderman & Johnston-Rodriguez, 2009).

Instructional Strategies for Differentiated Instruction

Hall (2002) described differentiated instruction as a, "package of strategies" (p. 5); Tomlinson (2012) noted differentiation lacks formulas or recipes to follow. There is not one isolated list of strategies for teachers to use for differentiated instruction, but rather a combination of objectives, principles, and elements to consistently implement in the classroom. Furthermore, there was a consensus throughout literature and two repeated themes to use in differentiation, the first were grouping. In order for teachers to provide

collaborative and meaningful student groups, they must know and understand their students (Manning, 2010). This involves flexibility in grouping and willingness for teachers to change groups according to students' learning needs instead of keeping them the same to maintain planned lessons. Groups may be established and rotated according to student interests, abilities, gender, age, motivation, and topic (Goodnough, 2011).

Tiering is another common strategy found within differentiated classrooms; teachers tier a lesson by providing multiple processes, products, and environments for diverse groups of students to explore a common discipline (Tomlinson, 2012). Although the teacher is responsible for scaffolding one lesson to meet the needs of many students, the objectives and goals of the lesson remain the same: all students learn about the same topic (Jones et al., 2012; Goodnough, 2011).

Implementing Differentiated Instruction

Students and Differentiated Instruction

Learning is an individual process; accommodating personal needs assures a fair process. Although previous discussions focused on curriculum, differentiated instruction focuses on students not the curriculum; in other words, differentiated instruction concentrates on learners and their individual needs rather than the typical curriculum that challenges and motivates various students (Gavin, Casa, Firmender, & Carroll, 2013; Watson, 2011; Santamaria, 2009). These authors focused on developing advanced curriculum and providing additional support and modifications according to the needs of students. They achieved such differentiation by emphasizing concepts that scaffold student learning. Students learn best in diverse environments; the best diverse

environments involve differentiated instructional strategies (Dunn et al., 2009; Lee & Picanco 2013).

Typically, proponents of differentiated instruction suggested teachers differentiate four common elements for all students (Tomlinson, 2013):

- Contents
- Processes
- Products
- Environments

Authors (Gage, Lierheimer, & Goran, 2012; Tricarico & Yendol-Hoppey, 2012) reiterated the belief that content and processes required some sort of differentiation to provide support and challenges for students based on individual needs throughout the class; they emphasized that varied instructional activities not focus on the curriculum, but rather on students' learning profiles, interests, and involvement to assure quality products.

Contents. *S*tudents need to learn content, information, and material in order to be successful in today's schools. By differentiating students' content, the teacher prepares lesson plans that consider individual needs and abilities. Tomlinson (2012), Saban (2011), Goddard (2010), and Supovitz, Sirinides, and May (2010) explained how a group of students who work on the same content, through differentiated practices, produce various responses according to their prior knowledge, interests, and learning profiles; instead of concentrating on content, teachers direct students' attention to their individual needs and learning occurred. Some authors went outside the typical reading, writing, and

math lessons to include differentiation within their lesson; for example Shoemaker-Holdren (2012) and Hillier (2011) used differentiation while teaching lessons in the performing arts (art and music), Rasmussen (2012) within an English as a second language program, and Ertmer and Ottenbreit-Lefwich (2010) and Hutchison, Beschorner, and Schmidt-Crawford (2012) with technology using iPads to teach computer skills and literacy.

An alternate view on content came from Saez, Sidler-Folsom, Al Otaiba, & Schatschneider (2012); they discussed how teachers direct students' focuses by highlighting what is important to learn and removing less relevant information that may overload students' recall and development skills; this promotes skillfulness repetition and suggests teaching content – only content relevant for state standardized testing.

Processes. Processes refer to the specific events that occur throughout the school day. These events are the actions students take to master specific content. As students attempt to review, analyze, and solve problems, the implementation of differentiated processes becomes evident when student employ a number of methodologies (Burgess, 2012; Dunn et al., 2009; Struyven, Dochy, & Janssens, 2010; Pentimonti & Justice, 2009). Tomlinson (1999) discussed how an effective differentiated activity supports students to understand vital concepts of a lesson; it is something the student, "does in a range of modes at varied degrees of sophistication, in varying time spans, and with varied amounts of teacher and peer support" (p. 80). An example of a relevant process is web based learning, otherwise known as online learning or e-learning; Oliver, Osborne, Patel, and Kleiman (2009) and Okolo, Englert, Bouck, Heutsche, and Wang (2011) explored

how eighth grade students managed U.S. history lessons through web based learning environments and the additional support of textbooks and teacher-provided differentiated instruction. The use of technology motivated students while accommodating for individualized instruction.

Products. The final outcomes of assessments are the products. Whether a tangible item, collaborative effort, or oral defense, the students' product typically reflect what the students learned; it is important for teachers to provide clear expectations and design the contents and processes to stretch the students even though scaffolding may be necessary to assure students experience success (Santamaria, 2009; Berg & Wehby, 2013; Pillay, 2009; Ozder, 2011; Renzulli & Renzulli, 2010; Vygotsky, 1978).

Environments. Any place students go during the school day may be defined as an environment; examples include, but are not limited to: classrooms, hallways, offices, cafeterias, playgrounds or sport arenas, buses, and outside venues for excursions and fieldtrips. Welsh (2011), Pillay (2009), and Ozden (2011) discussed the important of creating a safe learning environment by emphasizing how much classroom teachers set the tone and influence students' perceptions of success. The reasoning is because the human brain is a parallel processor that absorbs information on a conscious and unconscious level; the brain can simultaneously handle understandings, sensations, and observations (Welsh, 2011; Pillay, 2009; Ozden, 2011). Teachers' actions establish what kind of environment occurs and how safe students feel to express personal views and opinions. Ernest et al. (2011) noted that when a teacher, "alters the learning environment and creates a surrounding conducive to calm learning, that she is better able to reach

students - is one of the easiest ways to differentiate, but one that is nearly always ignored" (p. 197).

In addition, emotional environments are considered when discussing differentiated instruction and students. Differentiated instructional strategies benefit all types of students even though throughout the literature authors debated on whom benefited the most for such mythologies. Two specific student populations that benefit from differentiated instruction are talented and gifted students and the general education students.

Talented and gifted students. Talented and gifted students are described as highly motivated learners who can analyze abstract content and move quickly through the processes of a typical classroom (McBee, Peters, and Waterman, 2014). Talented and gifted students often enjoy flexibility and autonomy, although group work is sometimes welcomed among their academic peers (Manning, Stanford, & Reeves, 2010; Bangel, Moon, & Copabianco, 2010; Berlin, 2009). Because differentiated instruction affects the products of these students, it is be a part of how they are educated (Subotnikl et al., 2011 & Jenkins et al., 2013). But how do teachers meet the individual needs of all students and still provide a higher-level cognitive curriculum for talented and gifted students? The answer lies in providing differentiated instruction that cultivates the talents and skills of talented and gifted students (Crepeau-Hobson & Bianco, 2012).

Some authors suggested little attention is given to advanced learners in the general population classroom; they think many teachers make small, irrelevant adjustments to the content or processes that fail to meet their advanced educational

requirements (Crepeau-Hobson & Bianco, 2012; Berlin, 2009). Goodnough (2010) noted preservice teachers typically enter classrooms void of hands-on experiences with differentiation; as a result, talented and gifted students may not be challenged in the classroom. Preservice teachers typically devote instructional time to tutoring general education students while talented and gifted student participate in cooperative learning groups and repeat previously mastered content.

Park and Oliver (2009) identified other variables that may contribute to the low success rates of talented and gifted students in general education classrooms. These variables include: (a) "asking challenging questions" that annoy the teacher, (b) acting "bored" and "impatient" due to an ability to quickly retain content as compared with general education students, (c) "having a fear of failure" that results in underachievement, (d) "disliking routine, drill, and busy work," (e) self-awareness that highlights their uniqueness, and (f) "being critical" of fellow general education students (p. 339-341).

General education students. Initially, differentiated instruction was considered to be an effective strategy to only accommodate talented and gifted students; but Blecker and Boakes (2010), Heacox (2012), Kanevsky (2011), and Santamaria (2009) suggested these strategies are effective for all learners, regardless of student aptitude. Welch (2011), Obiakor, Harris, Mutua, Gage, Lierheimer, and Goran (2012), Rotatori, and Algozzine (2012), and Santamaria (2009) also emphasized that if differentiated instructional methods are effective for gifted and talented students or special education students, then they probably will be relevant for general education students as well; they believed education functions best when reflective and nurturing to the whole child versus

concentrating on intelligence and exclusiveness. Welch and Obiakor et al. also believed these methods were designed to support students who struggle with learning.

General education students are described as those not participating in a talented and gifted or special services program and seen as average or common to many educators; administrators and teachers often support differentiated methodologies that reach all students and raise standardized test scores (Goddard, 2010). Typically general education students acclimate to differentiated instruction, but they require clear directions and a reflection period to think about an assignment before attempting any task; in addition, they want the teacher to provide sufficient time to complete a task (Crepeau-Hobson & Bianco, 2012; Fahsl & McAndrews, 2012; Kanevsky, 2011; Subotnikl, Olszewski-Kubilius, & Worrell, 2011; Welch, 2011). Differentiated instruction helps students attain skills within developmental areas (Recchia & Puig, 2011). Manning et al. (2010) discussed how differentiation commonly occurs in today's schools for general education students who need remediation; RtI programs also integrate differentiated tiered strategies for the assessment and instruction of general education students who need assistance, specifically in reading (Jones, Yssel, & Grant, 2012). But other authors focused on how it improves the academic progress of all students (Goddard, 2010; Simpkins et al., 2009).

Newman and Hubner (2012) believed students can learn at a faster pace and review more content when the teacher implements differentiated strategies in the classroom. Multiple authors' perspectives, (Simpkins et al., 2009; Roe, 2010; Beecher & Sweeny, 2008; & Berkeley at al., 2009) believed differentiated instruction was a

necessary pedagogical approach specifically for general education students; repeatedly they emphasized the importance of content and processes being relevant for all students which directly relates to student success. Saez et al. (2012) provided an example of relevant content for general education students by showing how they self-regulated their learning with teachers who received instruction on how to use research-based reading strategies and work with students in small groups. Teachers were provided training on how to individualize instruction as a general education teacher.

Teachers and Differentiated Instruction

Teachers who attend staff developments, training events, and workshops consistently reported a greater use of diverse teaching strategies in their lessons (Shymansky, Wang, Annetta, Yore, & Everett, 2012). They specifically attend these events to increase their knowledge and self-efficacy; they also identify their gaps in knowledge throughout the process (Zeegers, Paige, Lloyd, & Roetman, 2012; Sharmal, Loreman, & Forlin, 2012). Shulman (1986) listed the types of knowledge required for teachers to obtain as:

- Content knowledge
- General pedagogical knowledge
- Curriculum knowledge
- Pedagogical content knowledge
- Knowledge of learners and their characteristics
- Knowledge of educational contexts

- Knowledge of educational ends, purposes, values and their philosophical and historical roots (p. 7).

Universities, school districts, and administrators strive to provide teachers with these types of knowledge, but they are not always successful (Goodnough, 2010; Greenfield, Rinaldi, Proctor, & Cardarelli, 2010); this results in teachers not understanding the complexities of student learning or effective strategies to implement differentiation. No evidence was found to identify specific training teachers received on the implementation of differentiated instructional strategies – current research does not explain how and where teachers receive information about differentiated instruction.

This gap provides the incentive to explore teachers' perceptions about differentiated instruction. Walker-Dalhouse et al. (2010) emphasized the importance of professional development and support for educators who implement new instructional strategies, such as differentiated instruction, but they did not identify specific training courses, procedures, or topics. Ernest et al. (2011) noted some teachers perceive differentiated instruction as a fad and not willing to invent time into learning necessary strategies. Others consider training and pedagogical practices important but acknowledged how difficult it was to implement new strategies (White et al., 2012). Furthermore, additional authors (Reis et al., 2011; Blecker & Boakes, 2010; Harris & Brown, 2009; Goddard et al., 2010; Aldridge, Fraser, Bell, & Dorman, 2012; Ertmer & Ottenbreit-Leftwich, 2010) shared evidence that teachers consider differentiated instruction as ineffective or challenging to implement on a day-to-day basis due to complications with time management and lack of administrative support. Ironically,

Jenkins et al. (2013) discovered 80% of educators who attended a national RtI conference, believed they offered a differentiated reading curriculum to their students. Goddard et al. (2010) and Simpkins et al. (2009) found that teachers who use differentiated believed their efforts were successful. There is an inconsistent perception of who accurately uses differentiation in U.S. schools.

Dunn et al. (2009) and Welch (2011) pointed out the importance of providing general education teachers with training on differentiated instructional strategies to develop highly-effective teachers; although her reasoning was specifically related to the well-being of talented and gifted students because they characteristically receive the same instruction as their general education peers, it is still relevant. Manning et al. (2010) considered differentiated instruction a student centered means of teaching – it is not curriculum dependent meaning differentiated methodologies could be applied to any program in any school; this does not eliminate the additional work initially required to make differentiated instruction successful. According to Reis et al. (2011) teachers liked using differentiated instruction because they discussed the satisfaction of teaching the same content using multiple processes and procedures day-to-day.

Recchia and Puig (2011), Washburn, Joshi, and Cantrell (2011) and Berry (2010) identified the challenges, successes, and attitudes of preservice teachers within general and special education classrooms; these preservice teachers discussed how their own personal learning styles and experiences affected their beliefs and attitudes towards differentiated instruction. The participants agreed on the need for varied instructional strategies and reflected on their own experiences to fully understand the positive effects

of diversity, differentiated instruction, and social justice (Recchia & Puig, 2011; Liakopoulou, 2012). Teachers' personal barriers may affect the implementation of differentiated instruction even though, as previously noted, examined research states preservice teachers receive a positive foundational view of differentiated instruction during undergraduate work but lack hands-on experiences implementing such methodologies (Goodnough, 2010). Fuchs, Fuchs, and Stecker (2010) considered the teacher use of differentiation a skill; it is not enough to have foundational views of differentiation during undergraduate studies. They described hands-on experiences that create a differentiated classroom developing into a part of teachers' daily practices (Fuchs et al., 2010).

Summary and Conclusions

In this chapter I introduced differentiated instruction and discussed the literature search strategy. Then I described the conceptual framework and synthesized refereed literature, theorists, and philosophers as they related to differentiated instruction. The literature provided an emergent of common themes regarding the constructionist views of current authors and of Piaget (1951) and Vygotsky (1978): children learn through socialization and interaction with their surroundings and build schema throughout each stage of life. An elaboration of the definition provided the objectives of differentiated instruction as a focus on student achievement, not curriculum; teachers develop lesson plans that consider student learning profiles, academic abilities, and interests. A general understanding on the principles of differentiated instruction occurred in the subsequent section. Although the concept of differentiated instruction could be indefinite, six themes

formed and were discussed. In this chapter I also included a review and synthesis of related studies and why a hermeneutic, phenomenological study is meaningful and concluded with additional sections examining instructional strategies and how to implement differentiated instruction as an instructional strategy.

In Chapter 2 I documented what is known about differentiation by discussing its effectiveness and benefits for students; there was a consistent belief that careful selection and implementation of appropriate strategies by teachers, based on ongoing data collection and review, enhances all students' learning. An abundant amount of current, refereed literature regarding the rationale and planning processes of differentiated instruction exists. But there was a gap in understanding what teachers know and how they define and use differentiation in the classroom; little information is known about educators' personal knowledge of differentiation practices. This study is important for all educators because a gap still exists in understanding teachers' perceptions of differentiation and this study will provide a phenomenological view of how teachers experience and what they know about differentiated instruction; it will focus on how teachers define, familiarize, implement, and perceive differentiated instruction in an elementary (K-5) classroom. A final report (Appendix M) will describe the phenomenon of differentiation. Within Chapter 3 I will explain how this hermeneutic, phenomenological study will connect the existing gap in the literature and provide insight of how participants experience differentiation, what they know, how they implement, and barriers of the implementation process. Results will describe teachers' definitions and understandings that guide future staff development opportunities on differentiated

instruction. It may generate a conversation about more training opportunities for teachers. Based on research results, teachers may create awareness and agreement for defining differentiated instructional strategies and promote future steps needed within their schools to use differentiated instructional strategies.

Chapter 3: Research Method

Introduction

The purpose of this hermeneutic, phenomenological study was to explore how elementary (K-5) teachers defined, familiarized, used, and perceived differentiated instruction in an elementary classroom. Although there were great amounts of research relating to the topic of differentiated instruction and its use among educators, there were few current, refereed contributions indicating what teachers knew about differentiated instruction, if they were provided professional development about differentiated instruction, and how they perceived differentiated instruction in the classroom.

In Chapter 3, I will examine the research methods of this hermeneutic, phenomenological study; specifically, I will describe the role of the researcher as a participant within a southwest elementary (K-5) school and identify processes to obtain participants and alternates. The research questions were established to determine experiences of differentiation. The interview questions were used to explore teachers' attitude, knowledge, and perception of differentiated instruction. The methodology will include the participation selection logic, instrumentation of researcher-developed instruments, recruitment, participation, data collection procedures, and the data analysis plan. Issues of trustworthiness and ethical procedures conclude this chapter before a summary.

Research Design and Rationale

This research questions for this study were the following:

1. How do elementary (K-5) teachers define differentiated instruction?

2. How do elementary (K-5) teachers learn instructional strategies for differentiated instruction?
3. How do elementary (K-5) teachers implement differentiated instruction in classrooms?
4. What are the barriers to fully implement differentiated instruction?

Differentiating instruction is one method teachers use to meet the needs of all students; Weisberg et al. (2009) and Welch (2011) noted teachers' willingness to use this technique, but administrators' failure to provide training on differentiation instead opting to focus solely on state standards instead of a combination of content and pedagogy. Nonetheless, without training, teachers attempt this practice resulting in inadequate differentiated instruction; this is expected because Tomlinson and Santangelo (2012) discussed differentiation as multidimensional with numerous requirements. Clark (2010) stated, "People find for themselves the most desirable method of learning strategies; therefore, teaching methodologies need to be varied" (p. 37). Clark suggested that it is not possible to explore content in isolation, but instead teachers learn differentiated instructional strategies within multiple contexts of core disciplines.

Differentiation works for students; yet, despite this information, little direction is found in the literature to provide evidence of what teachers know about differentiation and when teachers receive training on how to implement differentiated instructional strategies. Furthermore, teachers may perceive differentiated instruction as ineffective or challenging to implement on a day-to-day basis. So instead, teachers use grouping or integrate multiple intelligences within collaborate lessons to form a supposal

differentiated classroom (Alavinia & Farhady, 2012; Hamdan & Mattarima, 2012), but key elements of differentiation discussed by Kanevsky (2011), Subotnikl et al. (2011), and Welch (2011) are ignored resulting in ineffective differentiated instructional practices. Walker-Dalhouse et al. (2010) provided data on the importance of professional development and support for educators who implement new instructional strategies, such as differentiated instruction. Furthermore, teachers' personal barriers and experiences may supersede differentiated instructional training, thus affecting the implementation of these practices even though most teachers begin their career with a positive opinion of differentiated instruction during undergraduate work prior to full-time employment (Goodnough, 2010). Something happens within the initial years of teachers' careers causing a disparity between implementing previously learned pedagogical strategies and creating an effective classroom.

Laudan (1977) discussed how research traditions affect society's ability to structure thoughts about progression in theory; comparing and identifying teachers' knowledge and perceptions – their experiences – of differentiated instruction at this school may provide similarities and differences to initiate future studies. In this hermeneutic, phenomenological study, I offered data with which to draw generalizations of common experiences of why participants think a certain way about differentiation and why they develop particular pedagogical practices.

Additional research traditions considered for this study included case study, ethnography, and narrative, but the paradigm characteristics of these approaches are less effective because they do not support understanding the participants' experiences with

the phenomenon of differentiation. In a case study, the researcher would examine fewer cases, in-depth, without addressing individuals' experiences about differentiation. Ethnography would not be an appropriate approach because it examines cultural characteristics and a cultural scene; differentiation is not a cultural experience. The narrative approach would be too broad of an approach for examining individuals' specific experiences in a current classroom; artifacts are not necessary to understand perceptions. Quality research includes thorough investigator preparation, clear goals, relevant literature, and triangulation. Worthy topics and support for conclusions with evidence also contribute to a quality research project. As previously noted, clear objectives and open communication are essential. Ultimately, corroborating viewpoints that provides new insight to the research questions will contribute to the overall quality of our work. By providing an overabundance of details outlining biases, methodology, and analysis, it is possible to make positive strides towards quality research and social change.

Role of the Researcher

I was the primary instrument in the data collection process (Merriam, 2009; Patton, 2002). As the only individual conducting the fieldwork, my role was to be competent and undistracted. Within this particular study, I did not personally or professionally know the faculty or staff at this southwest school; therefore, I did not know the participants and did not have any supervisory or instructor relationship with this school. The role of the researcher was as a participant; initially, I introduced the study during a morning faculty meeting and directed individuals wishing to participate in this study to call or text me on my personal, private mobile telephone; I set a deadline of 72

hours to accept volunteers for this study. When individuals called and texted me, I established a time to meet to review the consent form. Next, I met one-on-one with the volunteers to review the consent form (Appendix B or C) and answer any additional questions. My role continued by interviewing teachers using predetermined questions in private (Appendix E) and whole group (Appendix F) settings. I recorded participant responses by using one RCA digital recorder. My role as researcher involved memoing (i.e., recording reflective notes during the interviews and during the data analysis process) and also included transcribing each interview as noted in Appendix H and K.

Ambiguity, researcher biases, and possibilities of discussing other topics during interviews were avoided by only discussing information about differentiation that was approved by the Institutional Review Board of Walden University. In addition, my location was limited to a private conference room and classroom/library research sites, making social interaction and preconceived ideas with faculty members nonexistent. In this hermeneutic, or interpretive, phenomenology bracketing was accepted as implausible because my preconceptions of differentiation cannot be eliminated (Chan, Fung, & Chien, 2013). I am a proponent of differentiation; however, my personal opinions were not shared with the school or teacher participants; it is also worth noting I am open to alternative views of differentiation and understand that not all teachers accept students being treated differently (Manning, Stanford, & Reeves, 2010; Saban, 2011). In addition, my role as researcher involved not sharing information about the study with faculty, staff, and administrators until the entire staff met as a whole group. My brief biography as an observer-participant was shared with the school to establish my occupation and not as an

attempt to influence the study. Participants were asked to wait until the study concluded before sharing information with colleagues, if desired. Confidentiality was paramount throughout the entire process. No monetary compensation was exchanged during this study, including gifts or refreshments.

Methodology

Participant Selection Logic

The participants were 12 teachers: seven participated in one-on-one interviews and the remaining five participated in a focus group. I also asked for, and received, five alternate teacher participants. If too few participants were available, I had permission from the assessment, accountability, research, and school improvement offices of the school district to contact other principals for an alternate study site of my choice and would have filed appropriate forms with the Institutional Review Board of Walden University and wait for approval. This did not occur. Patton (2002) concluded that it is better to comprise small sample sizes and go into more depth with participants. Consent forms (Appendix B or C) were signed and returned prior to the commencement of the study. Although the rationale for sample sizes within qualitative research varies from author to author, there were consistent themes of purpose, privacy, and process within the literature; study objectives may determine sample sizes (Johnson & Christensen, 2008; Maxwell, 2013; Miles & Huberman, 1994; Patton, 2002). Patton (2002) argued that there was no ideal way to identify sample size for a qualitative study.

The sampling strategy involved purposeful selection. Qualitative sample sizes should be determined by the research question, qualitative approach, and methodology of

the design (Maxwell, 2013). Maxwell suggested, unlike quantitative probability or convenience sampling that defines superior research, qualitative sampling is a purposeful selection. Johnson and Christensen (2008), Maxwell (2013), Miles and Huberman, (1994), and Patton (2002) provided a justification for the purposeful sampling strategy of this study; teachers were introduced to the study during a morning faculty meeting and informed of its voluntary nature. I answered questions about the study from the faculty and directed individuals wishing to participate to call or text me on my personal, private mobile telephone; this number was posted on the Smart Board in the room. I set a deadline of 72 hours to accept volunteers for this study. When individuals called or texted me, I also established a time to meet to review the consent form. Only licensed, highly qualified (K-5) teachers who passed the Pre-Professional Skills Test (PPST), the Principles of Learning and Teaching (PLT) test, and the Specialty Area test (Department of Education, 2014) attended the faculty meeting and were able to volunteer as a study participants. All teachers at this study site were fluent in English. This hermeneutic, phenomenological study involved in-depth interviews and member checking and described how (K-5) teachers as participants experience differentiated instruction.

All (K-5) teachers at the study site were highly qualified; according to the school principal only licensed, highly qualified teachers attended the morning faculty meeting where I introduced the study and invited 12 teachers to participate in this phenomenology and share their individual experiences with differentiation. Next, I met with each individual teacher as a participant during the following school days and reviewed the consent form (Appendix B or C) according to the teacher's schedule. Respondents had

the opportunity to again accept or reject participation. Participants chose their individual role as one-on-one interview or focus group member. This process repeated until 12 viable participants were identified; five alternates were also selected and available if attrition fell below 12 teachers as participants. This did not occur. Choosing teachers for in-depth interviews provided information unattainable from other research approaches and did not saturate the information from the school; Patton (2002) suggested it was better to include small sample sizes and go into more depth with participants. Seven individual interviews occurred in the participant's classroom the following days; five additional participants joined a focus group held in a school conference room.

Instrumentation

All data collection instruments within this study were researcher produced and included the following:

- Interview questions (Appendix E)
- Focus group questions (Appendix F)

These instruments concentrated data collection into specifically focused interview questions. The decision to not use a qualitative software package for the data analysis was derived from the phenomenology research approach and consistent with other phenomenological studies. Frequently used software programs for CAQDAS are not updated and do not receive technical support making the data unreliable and inconsistent. I transcribed and examined all interviews for themes in the data. Participants also reviewed the data during a follow up interview using a member checking technique; this took place on following days during the interview process allowing the participants to

review my interpretation of the interview and a section of the report (Johnson & Christensen, 2012; Merriam, 2009) rendering the assistance of a CAQDAS unnecessary. Such personalized data content and descriptions of participants' experience of differentiation would not be possible using quantitative data or other qualitative research approaches (Creswell, 2012).

The development of interview questions for this hermeneutic, phenomenological study was modeled after Janesick (2004) and (Johnson & Christensen, 2012) by using open ended processes that allowed the interviewees and focus group members to go into depth about their knowledge, perceptions, and experiences of differentiation. Questions focus on participants' overall experiences and perceptions of differentiation.

Researcher developed instruments

Creswell (2007) noted that even though there are multiple types of data, all may be categorized into one of the four following, "observations, interviews, documents, and audiovisual materials" (p. 129). This phenomenology used individual and whole group, focus group, and interviews; the protocols (Appendix D) provide an outline of the process. The basis for all instrument development was current refereed literature and the conceptual framework as it relates to the previously discussed ideas of Piaget (1951), Vygotsky (1978), and constructivism. Authors guided the development of all instruments on differentiation (e.g., Goddard, Neumerski, Goddard, Sallous, & Berebitsky, 2010; Goodnough, 2010; Kanevsky, 2011; Reis et al., 2011; Renzulli, & Renzulli, 2010; Subotnik1, Olszewski-Kubilius, & Worrell, 2011; Tomlinson, 2013; Tomlinson & Santangelo, 2012; and Walker-Dalhouse et al., 2010).

Content validity was established within this hermeneutic, phenomenology through direct interaction with the teachers as participants; I conducted face-to-face interviews allowing direct access to participants' experiences of differentiation (Patton, 2002). Shultz, Whitney, and Zickar (2013) also discussed measuring content validity as an agreement among experts. All participants within this study were licensed educators and considered experts; content validity was established when more than half of the expert participants agree that a subject was valid, then that item will had content validity – the consensus of experts helped establish content validity. In addition, their agreement of responses was compared with current refereed literature and constructivism ideas to establish an additional layer of content validity.

Johnson and Christensen (2012) discussed the data collection method for a phenomenology by using in-depth interviews; a focus group is a form of interviewing. These authors also explained the data analysis approach as, "listing significant statements, determining meaning of the statements, and identifying the essence of the phenomenon" (p. 398). Using open ended interview questions allowed the participants opportunities to describe their personal experiences with differentiation established the sufficiency of data collection instruments.

Procedures for Recruitment, Participation, and Data Collection

Participants were volunteers who wanted to join this study; the site was chosen because it intentionally offered information about differentiated instruction through purposeful sampling from licensed teachers. Two data collection instruments for this hermeneutic, phenomenological study involved questions for two separate events, one-

on-one interviews and focus group. First, I collected data from seven participants who shared their experiences during one-on-one interviews. These one-on-one interviews occurred in the teacher's classroom. Each interview was one session lasting approximately 50 minutes and included a digital, audio recording. In addition, a follow-up interview occurred the next school day lasting no longer than 10 minutes allowing clarification, as needed. Second, I collected data from five participants who share their experiences during a focus group meeting in a school conference room. The focus group met for approximately 50 minutes after school and similarly included a digital, audio recording. They also had an opportunity to review my notes checking for clarity during a member checking, follow-up interview lasting 15 minutes the next day after school. My role during both events involved conducting the interviews and leading the focus group. The dissemination of the study's results were provided to the entire faculty and staff of this elementary school during a previously scheduled, after-school meeting as set by the school principal on Thursday, February 12, 2015; I provided the faculty and staff a narrative report (Appendix M) that reviewed the study and includes common essences, themes, issues, and implications for future research. Pseudonyms were used within the report and I did not address the teacher participants during the meeting.

Data Analysis Plan

Miles and Huberman (1994) discussed qualitative analysis as a, "concurrent flow of activity: data reduction, data display, and conclusion drawing/verification" (p. 10). Patton (2002) suggested this flow of activity is an, "analysis process" (p. 447). The objective of the data analysis plan was to collect comprehensive and descriptive

information from the participants. The data collection instruments, interview questions, directly related to all four research questions: how do elementary (K-5) teachers define differentiated instruction, how do elementary (K-5) teachers learn instructional strategies for differentiated instruction, how do elementary (K-5) teachers implement differentiated instruction in classrooms, and what are the barriers to fully implement differentiated instruction?

Procedures during the data analysis involved:

1. I transcribed verbatim all one-on-one interview (Appendix H) and focus group (Appendix K) sessions.
2. Open coding allowed a search for significant statements from individual participants that have specific application to differentiated instruction. Significant statements may be descriptive words, phrases, or sentences that have particular meaning to each participant while recalling the experience. I created a list of essence, or meanings (Appendix L) that contained literal commonalities in the human experience as relating to differentiation.
3. Next I implemented axial coding by exploring how the relationships of categories related to each other – connections were made between them. I looked for features of differentiation that are experienced by nearly all participants. If an anomaly occurred, I left it on the open coding list, but did not include it during the axial coding process.
4. Finally, selective coding identified a single category that builds a core of the phenomenon.

As previously discussed, member checking occurred during the data collection and analysis processes; the data analysis plan was hermeneutic and inductive, exploring the phenomenon of differentiated instruction. The data were composed into a final report (Appendix M); this narrative includes a description of the participants and the methodology as discussed in Chapters 1 and 3. It also includes a thorough description of the essence, experience, and findings. Discrepancies of participant experiences were compared with the entire collection of data, as well as current refereed literature, and noted.

Issues of Trustworthiness

Internal Validity

Internal validity establishes whether or not the research results correctly reflect the study and if the results are supported by the data (Miles & Huberman, 1994). Strategies to form internal validity within this study included: (a) data triangulation, an examination of experiences from interviews, a focus group, and member checking, (b) engagement, the interviews will occur face-to-face in private environments, and (c) current refereed literature, Vygotsky's ZPD (1978), and Piaget's constructivist theories (1978; 1951) guided the study data.

External Validity

External validity measures if the conclusions of a study will happen in other settings (Miles & Huberman, 1994; Maxwell, 2013). Strategies to form external validity were limited in this hermeneutic, phenomenological study because the participants are representative of a particular (K-5) elementary population. An assumption was made that

the conclusions may not be valid to populations outside this study; however a reader may consider transferability if the study participants are similar to other environments and if the conclusions are justly applied to other settings.

Within this study and research design, there were disparities between validities because greater measures were taken to increase chances for a higher degree of internal validity; doing so decreased the generalizability of the conclusions resulting in a lower external validity.

Dependability

Dependability establishes if a true depiction of a phenomenon is being presented (Miles & Huberman, 1994, Patton, 2002). Strategies to form dependability within this study included: (a) descriptive report of the actual experiences of the phenomenon allowing future duplication from other scholars, (b) data triangulation, an examination of experiences from interviews, a focus group, and follow-up interviews for all 12 participants, (c) overlapping methods, such as using the same participants in one-on-one interviews and in a focus group if alternates are no longer available, and (d) reflective interpretation of the conclusions that will include implications for positive social change (Shenton, 2004).

Confirmability

Confirmability assures that the conclusions of the study are the opinions of the participants and not my beliefs (Shenton, 2004, Patton, 2002). As I discussed in Chapter 1, bracketing was not plausible for a hermeneutic, phenomenological study. However, strategies do exist to form confirmability within this study and include: (a) reflexivity,

acknowledging that the role of the researcher involves self-awareness and that personal biases were inevitable; (b) audit trail, although considered a common characteristic of dependability, an audit trail followed the concepts in the research questions to the end report and provide a transparent description of the steps taken from beginning to end, and (c) triangulation, acknowledging its role is invaluable to ensure the results are only the ideas of the participants (Shenton, 2004).

Ethical procedures

A school letter of cooperation was obtained from the principal to conduct this hermeneutic, phenomenological study (Appendix A). The Institutional Review Board at Walden University provided authorization to use human subjects in this research study. The population was 12 teachers at a southwest (K-5) elementary school who participated during interviews; all teachers as participants completed an informed consent form (Appendix B or C) discussing guidelines according to their participation level, involvement, and procedures of the study. The one-on-one interviews occurred at a time chosen by each individual participant. Individual interviews occurred in the participant's private classroom the following days (Creswell, 2012); participants were available for a 10 minute follow-up interview. The focus group occurred convening for approximately 50 minutes. A follow up interview with the focus group also occurred the next day.

The Walden University Informed Consent Form (Appendices B & C) discussed the study; information on the informed consent forms includes: (a) overview of the study, (b) specific time requirements, (c) voluntary status noting a participant may leave at any time during the study without consequences, (d), confidentiality agreements, and (e) a

discussion of no compensation for participating. This information was reviewed and signed by the participant before research began. In addition, five alternates were identified but did not complete the consent forms because they were not chosen as teacher participants. If this location did not produce necessary participants, the assessment, accountability, research, and school improvement division of the school district allowed me to contact others principals of my choice for the study site. In addition, I would have completed a Request for a Change in Procedures form with the Institutional Review Board of Walden University. Approval would have been required from this new target principal and IRB before conducting the study. This did not occur. Interviews were audio recorded and I transcribed all recordings; participants reviewed a written transcript of the meeting. All information remained confidential and was not unattended during the study. Pseudonyms are used in all written materials relating to this dissertation to protect individual privacy in shared and published data. All materials associated with this study will be destroyed after 5 years; until then, it is maintained in a secure, locked location at my residence.

Summary

In Chapter 3 I examined the research design, rationale, and methodology of this hermeneutic, phenomenological study. Differentiating instruction is one method teachers use to meet the needs of all students. The review of the current, refereed literature demonstrated that differentiation works for students; yet despite this information, little direction was found in the literature to provide evidence of what teachers know about

differentiation and how they know it. Nor do authors of refereed literature discuss when teachers received training on differentiated instructional strategies.

Participants were informed of this hermeneutic, phenomenological study during a school faculty meeting. Only highly qualified teachers attended this meeting and had the opportunity to privately volunteer as a participant. Teachers as participants are anonymous in the final report. In-depth, open-ended interviews occurred using researcher developed instruments. A data analysis plan was provided according to Miles and Huberman (1994) and Patton (2002). Issues of trustworthiness included information on internal validity, external validity, dependability and confirmability. The process to gain access to a school, ethical concerns, and copies of documents were introduced and provided. Researcher produced instrumentations are included in the appendix. In Chapter 4 I will reintroduce the purpose and questions of this study; I will also describe the research site, organizational conditions influencing participants, participant demographics, data collection, and data analysis and provide evidence of trustworthiness and the results.

Chapter 4: Results

Introduction

The purpose of this hermeneutic, phenomenological study was to explore how elementary (K-5) teachers defined, familiarized, used, and perceived differentiated instruction in a classroom. The following research questions guided the study:

1. How do elementary (K-5) teachers define differentiated instruction?
2. How do elementary (K-5) teachers learn instructional strategies for differentiated instruction?
3. How do elementary (K-5) teachers implement differentiated instruction in classrooms?
4. What are the barriers to fully implement differentiated instruction?

In Chapter 4, I discuss the data that were collected, as well as the analysis process. Finally, the results are presented in order to respond to the research questions; any detectible patterns, relationships, and themes will be described. I conclude this chapter with evidence of trustworthiness: validity, transferability, dependability, and confirmability.

Settings

The setting for this study was an elementary school located in one of the 20 largest school districts in the United States; this particular public school opened to students in 2002 and remains updated with technology and building renovations. I conducted all interviews during the final 3 weeks of the 2013-2014 school year, after the state-mandated summative criterion referenced testing of elementary students. School

personal were preparing for the end of the school year, summer vacation, and personnel changes, if applicable, during my site visits.

Demographics

The teacher participants were volunteers who wanted to join this study. The two male and 10 female individuals had a combined history of teaching 129 years, with a range of 2 years being the least amount of teaching experience from one participant and 32 years being the most amount of teaching experience from another participant. All but three of the teacher participants held a master's degree in education, with only one person currently in graduate school. The teachers were from different content and grade levels, representing primary and intermediate grades. No special education, talented and gifted, or specialty teachers such as art, music, or physical education volunteered to participate in the study. All teacher participants are referred to in this study using pseudonyms; these demographics are organized in Appendix G.

Eight of the 12 participants had teaching experience at only one school, the study site. In addition, two out of these eight participants worked as leadership teachers to open this building in 2002 and remained there today. Only two of the participants had professional teaching experience at private or religious schools. However, all 12 participants were designated highly qualified by the U.S. Government (Department of Education, 2014). The current principal of the study site was the third principal in the school's 12 year history; he has been a principal for 6 years, all at this site.

All participants arrived on time and stayed for the entire length of the original, prearranged scheduled interview with me. Nothing was rescheduled or moved to another

date or time due to extenuating circumstances, this also included member checking interviews as I discussed in Chapter 1 of this dissertation. All participants admitted familiarity with the term differentiated instruction.

Data Collection

The same data were collected from each individual at the study site: seven participants within a structured interview format and five participants within a focus group format, for a total of 12 participants. I produced interview questions (Appendix E) and focus group questions (Appendix F) that served as the data collection instruments. All structured interviews were held in each teacher's private classroom during a planning period or after school. The classroom doors were closed, and I successfully conducted all seven interviews without any physical disruptions; only occasional unrelated, school-wide intercom announcements affected the process during Scott's, Jennifer's and Judy's interview. It was a minor disruption lasting less than 15 seconds each. Some classrooms were located outside the main building in portables.

The focus group interview began 45 minutes after school concluded in the building's conference room, located near the school entrance, faculty lounge, and main offices. The outside blinds were closed, and no other windows appeared in the room. The solid door was also closed. We were not interrupted during our time together observing most other faculty and staff had left the building.

All data were collected using one RCA digital recorder, model number VR6320.

Although spare batteries were available during the interview processes, they were not necessary. The initial interview question was presented to each participant on a 5-by-7 inch index card for ease and comfort of the participant. This is the extensive question -

Please take a moment to introduce yourself to me. Be sure to tell me:

a. Your name
b. Highest academic degree obtained: B.S./B.A., M.Ed., or doctorate
c. What you teach, your role, at this school
d. How long have you taught at any location, public or private school in years including the 2014 school year?
e. How long have you taught at only [redacted] in years including the 2014 school year?

All other questions were read to each participant without prior knowledge. Other variations in data collection from Chapter 3 did not occur.

Data Analysis

An additional 10 minute interview occurred as a part of the member checking process with each participant; during this time together, the participant and I reviewed the transcript I composed of our first interview and made adjustments, as necessary. This member checking process took place the following week, after school, in private classrooms; no other adults or children were present during the process. Upon returning home, I began the inductive process of open coding the transcripts to look for repeated words, phrases, and similar experiences with the teacher participants and differentiated instruction; each question and different participant response was examined in isolation

but in chronological order as they occurred in the original interview. Within each question and response, responses were color-coded according to similarities using highlight markers. The colors included were blue, green, lime, orange, pink, purple, rust, tan, and yellow. If no commonalities were found, a new highlight color was assigned to the discrepant response, and the data were considered throughout the open coding and axial coding processes; these data are listed in Appendix L. Repetitive answers are not listed multiple times. These common core experiences were first highlighted and numbered within the written text to create order before the axial coding process began. Three categories, or themes, were deduced for each interview question according to the participants' responses.

Specific codes, categories, and themes that emerged from the data are listed in Appendix L. Regarding information about the four research questions that guided this study, Tomlinson and Santangelo (2012) defined differentiation instruction as "A systematic way to conceptualize the process of teaching and learning such that each student's learning needs are honored and, consequently, each student's learning potential and outcomes are maximized" (p. 312); these elementary (K-5) participants provided a consensus of the definition focusing on each student's present learning needs and abilities. Participant Sandra defined differentiated instruction as "Teaching kids at their own different levels. Giving kids the instruction that they need at their level." Participant Joyce suggested differentiated instruction should "Making (*sic*) learning accessible to all types of learners and students, so whether it is a lot of hands on, visual, auditory, (*sic*) anything they need for instruction to be geared towards." However, none of the

participants explored a student's learning potential or future, maximized student outcomes.

Most participants learned instructional strategies for differentiation through staff development opportunities; although they thought training on differentiated instruction through professional development and school district in-services was beneficial, an overwhelming majority, 83%, believed it is best to learn about differentiation from hands-on experiences with colleagues and mentors in a demonstrational and observational setting, preferably an actual classroom. But participant Carol stated, "Through your school district because they give you strategies that help your specific classroom." Participant Tim admitted that he did not know about differentiated instruction during his first year of teaching. He stated, "I just knew I had to go into the classroom and learn about my kids."

How elementary (K-5) teachers implemented differentiated instruction in classrooms varied by each participant. Common themes that emerged from the data involved student grouping, assessment strategies, and instructional practices such as scaffolding, materials, and learning abilities; some participants, 58%, also discussed giving different assignments to different students according to students' ability levels. Participant Kimberly stated that "small grouping and finding ways to put kids together that can help each other" was a common strategy to differentiate a lesson. Participant Scott noted that he "Will pull a lot of small groups (*together*) and rely on their ability to do independent practice."

Barriers to fully implement differentiated instruction involved time, materials, and diverse student populations. While other participants discussed struggles with RtI and lack of funding, or money, for differentiation, the common response among most participant answers was time. Participant Brenda commented that differentiation "doesn't seem difficult, just finding resources that help and meet the needs of the kids is a challenge." Participant Jennifer stated, "The barriers is (*sic*) just finding enough time to prepare what you need to do. I am lucky that my kids that get done early in this group don't bother me; that's one of the barriers to keep the kids busy."

Evidence of Trustworthiness

Validity and Transferability

Strategies to form internal validity within this study included: (a) data triangulation, an examination of experiences from interviews, a focus group, and member checking, (b) engagement, the interviews will occur face-to-face in private environments, and (c) current refereed literature, Vygotsky's ZPD (1978), and Piaget's constructivist theories (1978; 1951). No adjustments were made during the implementation process of this study; interviews, member checking, and refereed literature were considered and utilized as previously described.

Strategies to form external validity were limited in this hermeneutic, phenomenological study because the participants are representative of a particular (K-5) elementary population. An assumption was made that the conclusions of this study may not be valid to outside populations; but a reader may consider transferability if the study participants are similar to other environments and if the conclusions are justly applied to

other settings. The degree of transferability is limited to case-by-case basis and individual circumstances.

Within this study and research design, there was a disparity between validities because greater measures were taken to increase chances for a higher degree of internal validity; doing so decreased the generalizability of the conclusions resulting in a lower external validity.

Dependability

Strategies to form dependability within this study included a: (a) descriptive report of the actual experiences of the phenomenon allowing future duplication from other scholars, (b) data triangulation involving an examination of experiences from interviews, a focus group interview, and follow-up interviews for all 12 participants, and (c) reflective interpretation of the conclusions that incorporated implications for positive social change. Although initially suggested in Chapter 3, I did not use an overlapping method of using the same participants in one-on-one interviews and in a focus group; this was not necessary because the original 12 adults who volunteered also completed assigned responsibilities throughout this study.

Confirmability

As discussed in Chapter 1, bracketing was not plausible for this hermeneutic, phenomenological study; however, other strategies did exist to form confirmability within this study thus assuring that the conclusions of the study were the opinions of the participants and not my beliefs (Shenton, 2004, Patton, 2002). These strategies included: (a) reflexivity, acknowledging that the role of the researcher involved self-awareness and

that personal biases will be inevitable. I refrained from adding my opinion and maintained neutral body language throughout all interviews; (b) I followed an audit trail as outlined and described throughout this dissertation and the Walden University dissertation checklist. This audit trail outlined the concepts in the research questions to the end report and provided a transparent description of my steps taken from beginning to end; and (c) triangulation, acknowledging its role was invaluable to ensure the results are only the ideas of the participants (Shenton, 2004). I reviewed and checked the transcripts of the interviews and member checking multiple times to confirm the opinions of the participants.

Research Results

The following data were organized according to research questions within this study. Although not combined, questions one and two are closely related and participant responses are intertwined conversations within the transcripts. Appendixes E and F provide a list of the interview questions used to collect information on the following.

Question 1

How do elementary (K-5) teachers define differentiated instruction?

Tomlinson and Santangelo (2012) defined differentiation instruction as, "A systematic way to conceptualize the process of teaching and learning such that each student's learning needs are honored and, consequently, each student's learning potential and outcomes are maximized" (p. 312). Despite a lack of consistent experiences with differentiation instruction within the school district or study site, the 12 participants

(Appendix G) provided a similar definition as Tomlinson and Santangelo by focusing on the readiness and learning needs of each student. Repeated themes included:

- Teach kids at their own level
- Teach in a way that students understand
- Teach students where they are
- Teach according to individual abilities
- Tailor teaching and curriculum to students' individual needs

Only when prompted did participants speak of considering students' interests. Participant Tim spoke of students choosing their own plant to examine in science and participant Judy discussed giving separate interest surveys to students and parents at the beginning of the year. The participants, however, did not explore students' learning potential or future, maximized student outcomes.

Question 2

How do elementary (K-5) teachers learn instructional strategies for differentiated instruction?

Initial interview questions focused on gaining information about the participants' professional habits regarding staff development. These questions explored participants' educational experiences outside the K-12 classroom and their interactions with differentiated instructional practices and provided a framework to develop definition of differentiation through open, axial, and selective coding processes. Regarding this group of teacher participants, the median numbers of years' experience in the classroom was 8.5

years; in addition, 8 years is the median number of years a teacher has spent at this study site. Regarding higher education, 75% of the participants had a master's degree.

Participants typically attended one staff development activity a month, preferably before the school day or during the summer break. Participants' least favorite time to attend teacher in-services was after school. Regarding the frequency of staff development opportunities, participant Sandra stated that she, "would not (*attend staff development*) as much as we (*sic*) used to just because there are so many restrictions. We used to be able to do it during the school day and you could get a sub (*substitute teacher*) so you could participate in a lot of different extra studies . . . the more I've been teaching the less I attend (*teacher in-services*)." The participants reached a consensus when discussing the focus of differentiation within staff development opportunities; although differentiated instruction may be mentioned or casually discussed within the realm of technology or reading, differentiation was not the focus of any workshops they attended. Participants heard that differentiation was a benefit to using technology, but staff development leaders did not explain, step-by-step, how to differentiate a lesson through technology for all students. Participant Amy noted "It is expected that we just do it." Although one-third of the teacher participants learned about differentiated instructional strategies through staff development events hosted by the school district, the participants thought it was most beneficial to learn about differentiation with hands-on experiences and conversations with mentors and colleagues. These included observing other teachers' classrooms, demonstrating teaching strategies for peers, and professional collaboration. Fourth grade teacher Participant Amy commented "I think a big thing with this staff is a lot of the staff

(*sic*) opened the school (12 years ago) or have been here a long period of time so we know this stuff. We will even do differentiated instruction across grade levels; like (*teacher*) Michelle ended up having a student in her class that was really low so he started coming to our reading group. Really differentiating for him was not feasible, so he started going to our lowest reading group in third grade."

Participant Judy reiterated "I like to see it modeled and be able to do it (*differentiation*) so when I go back to my classroom I know exactly what I am doing. It is really nice to observe . . . mentorship and modeling. Very simple strategies are the best ways for us to learn; the simpler things are the most effective. Mentors have to be out there sharing what they know." In fact, an overwhelming majority of the participants, 83%, believed it is best to learn differentiated instructional strategies from hands-on experiences with colleagues and mentors in a demonstrational and observational setting, preferably an actual classroom.

Question 3

How do elementary (K-5) teachers implement differentiated instruction in classrooms?

I explored scaffolding and common strategies used by the participants to teach a lesson before I asked for specific examples of how the participants implemented differentiated instruction in the classrooms. I also inquired about the use of technology throughout the school day and asked for examples of assessment. I even explored how the teacher's volume, tone, attitude, and mood affected the students. Finally I discovered the participants' opinions on the difference between teaching and test prep. All of these

inquiries, collectively, provided a clearer picture of how teachers view and implemented differentiation.

Pentimonti and Justice (2009) discussed scaffolding as teachers providing support to assist students' learning processes within a classroom, (e.g., supplies, materials, templates, guidelines, rubrics, models, and coaching). Participant Tim used a common building metaphor and provided agreement of scaffolding as "building background and previous knowledge for the kids. It (*differentiated instruction*) is getting to know what they know and building off that. It is taking the kids' knowledge and then using it in my lesson planning and my curriculum to help them." Most participants who used building terminology discussed the important to assisting students and making sure they have the background knowledge before beginning a new lesson. Scaffolding was only one method teacher participants used to implement differentiation in the classroom.

Technology played an important role throughout the participants' workday. In fact, four of the 12 participants, Carol, Scott, Brenda, and Amy, spoke of using data to inform instructional practices and as an assessment tool. Software programs such as Engage New York and Compass Learning were key elements of planning primary and intermediate grade level curriculums for these participants; Carol stated "Compass Learning does the differentiation for you!" Other participants noted the importance of Elmo and Smart Boards in the classroom as a way to provide unique and different perspectives of the curriculum via the internet. Participants reported most students are interacting with a computer lesson for at least 15 minutes, 3 days per week.

A teacher's volume, tone, attitude, and mood also played a role throughout the workday. Participants agreed that if a teacher was excited about a lesson, then the students would also be excited about that lesson; a positive attitude was the key to an engaging classroom. Participant Tim stated "I notice right way if I start to raise my voice, the kids react differently. If you are not a positive person with them and establish a good rapport, it's noticeable. If the kids don't care about you and you are just yelling at them and you are miserable being here, then that's how your class will be." Only three participants, Tim, Kimberly, and Jennifer, discussed the importance of developing a good rapport with their students; all other participants focused on engaging the students to be excited about learning.

Participants in this study see testing as a *necessary evil*; they view it essential to teach test taking skills but draw a distinct line between teaching and test prep. Uniquely, participant Susan discussed that teaching was about "the experience, the memories, (which) students remember as adults." But another participant's comment, Carol, reflected the sentiments of the group. She said "If we are only doing test prep, then the students are not learning." According to the participants, test prep is short term, repetitive actions best described as cramming. Teaching is engaging students to develop authenticity and understand concepts that translate to other situations.

Scaffolding, technology, and building teacher/student relationships were only some of the common strategies participants used to differentiate a lesson. These differentiated lessons most commonly occurred in reading, math, and science activities. However, a single theme emerged from interview to interview regarding how teachers

implement differentiated instruction in classrooms: the elementary (K-5) teacher participants of this study site overwhelmingly focused on grouping as a common strategy used to implement differentiated instruction in classrooms. Academic ability grouping of students was most popular, but on occasion some teacher participants grouped students according to interests and genders. Whole group or small group differentiated lessons were typical with project based or traditional pencil to paper assessments. Teacher participants also differentiated instruction within groups by altering cognitive levels of the teacher lead discussion.

Question 4

What are the barriers to fully implement differentiated instruction?

Several participants discussed materials and the RtI program as related to the topic of barriers and differentiated instruction. Participant Amy said "I think materials too. Especially with the RtI process, you have to try so many different interventions before you can move them on to the next level, before you can say this child may have a learning disability. It is kind of ridiculous that we have to do an intervention that we think will probably not work, but we have to get those three interventions in. So I would say partly materials."

Participant Brenda commented "I would say the challenges are when I don't have enough resources; differentiation is simply not practical on a day-to-day basis. If I have students who are below grade level, coming up with resources or coming up with ways to help them is a challenge. And then there are kids who are way up there reading at high

school level. So to find books and novels for them that are not so mature, but on their reading level to challenge them is difficult."

Participant Jennifer provided a different perspective of the barrier conversation by stating "If it were so easy that we could teach everybody the same thing and they could all learn the same thing we would put them in front of a computer and we wouldn't have a job. The same barriers with anything you teach, it doesn't matter the subject it is, the kids are all so different, more so than when I was a kid; there were odd balls like me that didn't fit in. And now, I am not even sure what normal is (*sic*). With what they are going home to in their home life, with the chemical imbalances in their body, whatever, so, you have to take that into perspective with what the kid is going through."

But overall, participants chose *time* as the number one barrier to fully implementing differentiated instruction. This is consistent with findings from the current, referred literature. Participant Jennifer noted "The barriers is (*sic*) just finding enough time to prepare what you need to do, and this time in fifth grade, I need to work with this five but I have another five that also need me. You are pulled in what you need to do."

Summary

The selective coding process of the data analysis process focused on a single category to define the phenomenon of differentiated instruction. Elementary (K-5) teachers defined differentiated instruction as an individualized instructional practice that focuses on the needs of all students. Elementary (K-5) teachers learned instructional strategies for differentiated instruction from professional mentors and colleagues. The most common method these participants implemented differentiated instruction in

classrooms were through the various grouping of students. The most common barrier to fully implementing differentiated instruction in a classroom discussed by the participants was a lack time during the day – not enough time to gather materials and work with each individual student, as needed.

In Chapter 4 I discussed the data collection and data analysis processes; in Chapter 5 I will explore the interpretation of the results, limitations of the study, and future recommendations and implications for differentiated instruction research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this hermeneutic, phenomenological study was to explore how elementary (K-5) teachers defined, familiarized, used, and perceived differentiated instruction in a classroom. It was conducted because there is great amount of research relating to the topic of differentiated instruction and its use among educators, but there are few current, refereed literature indicating what teachers know about differentiated instruction, if they are provided professional development about differentiated instruction, and how they perceived differentiated instruction in the classroom.

Key findings of this study are as follows: teachers know and understand the textbook definition of differentiated instruction, but differ on the best method to learn strategies for implementing this instructional process. Some favored professional development events hosted by the school district, while others suggested that teachers learn best from hands-on experiences with colleagues and mentors within an actual, live classroom setting. Grouping defined how these participants implemented differentiated instruction in their classrooms. They also agreed that time is the greatest barrier to fully implementing differentiation.

Interpretation of the Findings

Elementary (K-5) teacher participants at this study site defined differentiated instruction as most authors did within my refereed literature of Chapter 2 by focusing on the readiness and learning needs of the individual student. It was clear that all 12 participants understood the traditional textbook term, differentiated instruction as learned

in undergraduate, and perhaps graduate, classes at any university. Using various terms and phrases from personal perspectives, participants ultimately agreed with Tomlinson who stated that differentiated instruction involves "Doing whatever it takes to ensure that struggling and advanced learners, students with varied cultural heritages, and children with different background experiences all grow as much as they possibly can each day, each week, and throughout the year" (personal communication, March 22, 2013).

Equal opinions were given on how elementary (K-5) teachers learned instructional strategies for differentiated instruction: four participants referenced professional development and teacher in-service training events hosted by the school district, four participants cited learning about differentiation from academic conversations with colleagues and mentors, and the remaining four participants noted learning about differentiation from repetitive practice and hands-on experiences within their personal classroom settings.

The majority of our time was spent on exploring how elementary (K-5) teachers implemented differentiated instruction in classrooms. Participants struggled when asked to share a specific lesson that included differentiation; three participants, Carol, Kimberly, and Jennifer, shared a specific math or writing lesson that took the differentiation of content into consideration for multiple students. But Tim, Scott, Brenda, Judy, Amy, and Kelly spoke in generalities, even when prompted to provide a specific example. Donna, Susan, and Joyce did not respond to this question within the group interview setting. Multiple participants provided information about their teaching style and classroom environment instead of discussing a specific differentiated lesson.

Phenomenology requires the participants to be conscious of their "lived experiences" (Johnson & Christensen, 2012, p. 395); teachers must be able to recognize and identify the multiply aspects of differentiation and discuss these characteristics in a scholarly environment. Perhaps some participants may not have had sufficient intrapersonal skills or professional experiences to be able to communicate a concrete example of the multidimensional concepts of a differentiated lesson.

Several participants discussed scaffolding as a method to implement differentiation into a classroom. Pentimonti and Justice (2009) viewed scaffolding as a teacher's attempt to provide support in assisting students' learning processes within a classroom (e.g., supplies, materials, templates, guidelines, rubrics, models, and coaching). Another way to examine scaffolding is by reviewing Piaget's (1951) and Vygotsky's (1978) constructivism theory within psychological and social aspects; these theorists formed the building blocks of differentiated instruction by providing an understanding of how children learn in classroom environments according to background knowledge and past experiences. Pretests, think-pair-share activities, checklists, and software programs were strategies used by the participants to check for background knowledge.

Participants Tim and Kimberly used a typical building metaphor and provided agreement of scaffolding; Tim said:

> Building background and previous knowledge for the kids (*sic*). It is getting to know what they know and building off that. It is taking the kids'

knowledge and then using it in my lesson planning and my curriculum to help them.

Kimberly noted that she "helps build the foundation and they (students) help build the rest of the building. I give them the basis and see where they need to go." In fact, all participants used some sort of building metaphor to discuss scaffolding; they discussed the importance of assisting students and making sure they have the background knowledge before beginning a new lesson. Participants confirmed their knowledge of scaffolding and its importance as the basis to begin differentiating lessons within a classroom.

All of the participants discussed technology's role in a differentiated classroom. In fact, four of the 12 participants, Carol, Scott, Brenda, and Amy, spoke of using data to inform instructional practices and as an assessment tool. Software programs such as Engage New York and Compass Learning were key elements of planning primary and intermediate grade level curriculums for these participants; Carol stated "Compass Learning does the differentiation for you!" Other participants noted the importance of Elmo and Smart Boards in the classroom as a way to provide unique and different perspectives of the curriculum via the internet. This extends the knowledge within our discipline of effective teaching; these participants considered it differentiation.

Gardner (1983) emphasized the need for children to discover learning through nine multiple intelligences; participants discussed providing visual video clips of lessons while interacting with Smart Boards and Elmo in a whole group setting, which varies the visual and auditory supplemental materials and extends the curriculum by altering the

curriculum delivery. Hall (2002) and Tomlinson (2012) described the processes of differentiating a lesson that is complex and multifaceted. Hall said that differentiation should involve a "package of strategies" (p. 5); Tomlinson noted that differentiation lacked formulas or recipes to follow. There is not one isolated list of strategies for teachers to use for differentiated instruction, but rather a combination of objectives, principles, and elements to consistently implement in the classroom. Dewey (1997) integrated progressive philosophies with Rousseau (2003) and claimed that children learn when actively involved in meaningful tasks – certainly scaffolding and technology are part of these tasks. In addition, Goodnough (2011) noted that, although the teacher is responsible for scaffolding one lesson to meet the needs of many students, the objectives and goals of the lesson remain the same: all students learn about the same topic.

Teachers' demeanor affects a classroom. Ernest et al. (2011); Thoonen, Sleegersb, Peetsmaa, and Oort (2011); and Rubie-Davies (2010) discussed how students' motivation to learn was directly related to the teachers' sense of self-efficacy; and if the teachers possessed a positive attitude and promoted differentiated instruction assuring that the right student gets the right learning task at the right time, helplessness was not an issue. The participants also noted that a teacher's self-efficacy in relation to volume, tone, attitude, and mood affected their students; if a teacher participant was excited about a lesson, then the students would also be excited about that lesson; a positive attitude is the key to an engaging classroom. Participant Tim stated,

> I notice right way if I start to raise my voice, the kids react differently. If you are not a positive person with them and establish a good rapport, it's

noticeable. If the kids don't care about you and you are just yelling at them and you are miserable being here, then that's how your class will be.

Only three participants, Tim, Kimberly, and Jennifer, discussed the importance of developing a good rapport with their students as part of differentiation; all other participants focused on engaging the students to be excited about learning.

Tomlinson (1999) and Wormeli (2012) stressed that differentiated instruction is grounded in children's readiness, interests, and learning profiles and that teachers who modify curriculum according to these emotional and social needs make the greatest impact on learning. Participants did not discuss, nor did I mention the importance of developing differentiated lessons according to the emotional and social needs of the students.

The participants were aligned with a theme that emerged throughout the literature review as noted in Chapter 2; from interview to interview the elementary (K-5) teacher participants of this study site overwhelmingly focused on the grouping of students as a common strategy used to implement differentiated instruction within their lessons. Jenkins et al. (2013) discovered 80% of educators who attended a national RtI conference, believed they offered a differentiated reading curriculum to their students through grouping. Goddard et al. (2010) and Simpkins et al. (2009) found that teachers who use differentiated believed their efforts were successful. When asked, participants shared their flexibility in grouping and willingness for to change groups throughout the school year according to students' learning needs instead of keeping them the same to maintain planned lessons. Academic ability grouping of students was most popular, but

on occasion some teacher participants grouped students according to interests and genders. Whole group or small group differentiated lessons were typical with project based or traditional pencil to paper assessments. Teacher participants also differentiated instruction within groups by altering cognitive levels of the teacher lead discussion.

Within the confinements of an interview the participants shared dividing students into groups based on academic abilities but did not discuss those students' interests and learning styles. Without an in-depth exploration, such as a case study, it is difficult to confirm, but many participants appeared to use grouping or the integration of multiple intelligences within collaborate lessons to form a supposal differentiated classroom as noted in previous studies (Alavinia & Farhady, 2012; Hamdan & Mattarima, 2012). Key principles of differentiation, such as (a) know and understand the students and (b) create a comfortable learning environment were evident within our discussions, but evidence of a (c) proactive not reactive curriculum, (d) high student expectations, and (e) shared responsibilities was missing. Participants struggled to openly share varied assessment strategies without my assistance.

The result, as noted within the literature by Kanevsky (2011), Subotnikl, Olszewski-Kubilius, and Worrell (2011), and Welch (2011) were ineffective differentiated instructional practices. Walker-Dalhouse et al. (2010) provided data on the importance of professional development and support for educators who implement new instructional strategies, such as differentiated instruction.

Tomlinson (2012) noted that differentiated curriculum does the following: (a) plans student engagement throughout the lesson, (b) provides opportunities for pretest

assessments, (c) Proposes effective methods for students to know, understand, and do lesson content, (d) promotes teaching up with high student expectations, and (e) prepares students for posttests. Nine out of 12, or 75%, of the participants thoroughly discussed student engagement throughout a lesson, effective methods for students to know, understand, and do lesson content, and posttest assessments as part of their differentiation strategies. Only two participants discussed pretest activities and no one discussed teaching up with high expectations.

The other common theme of differentiated classrooms consistent throughout the literature was *tiering*. Teachers tier a lesson by providing multiple processes, products, and environments for diverse groups of students to explore a common discipline (Tomlinson, 2012). Within this hermeneutic, phenomenology I had direct interaction with the teachers as participants. In addition, I conducted face-to-face interviews and was allowed direct access to the participants' experiences of differentiation (Patton, 2002). This group of participants represented 129 total years teaching experience. I came to the conclusion and interpreted the participants' multiple discussions relating to assessments, instructional strategies, differentiated lessons, technology, scaffolding, and teacher perceptions and responsibilities as tiering.

The final research question of this study focused on perceived barriers of differentiation. Participants discussed resources, class sizes, money, and diverse student populations as barriers to fully implementing differentiated instruction. Several authors (Reis et al., 2011; Blecker & Boakes, 2010; Harris & Brown, 2009; Goddard et al., 2010; Aldridge, Fraser, Bell, & Dorman, 2012; Ertmer & Ottenbreit-Leftwich, 2010) shared

evidence that teachers consider differentiated instruction as ineffective or challenging to implement on a day-to-day basis due to complications with time management and lack of administrative support. Furthermore, teachers perceived differentiated instruction as ineffective or challenging to implement on a day-to-day basis. Participant Brenda confirmed this belief by stating "I would say the challenges are when I don't have enough resources; differentiation is simply not practical on a day-to-day basis." Participant Judy also established this belief by stating, "The professional development is also an issue; we can talk differentiated instruction, but I don't think a lot of teachers out there even understand what it looks like and how to do it unless they see it. Professional development is the key to the understanding and doing it every day."

But overall, participants chose time as the number one barrier to fully implementing differentiated instruction. Several studies noted that differentiated instruction is not consistently implemented in today's classrooms (Pham, 2012; Hillier, 2011; Muir et al., 2010; Swicord et al., 2013). One factor in this lack of consistency was time. Participant Jennifer noted "The barriers is (*sic*) just finding enough time to prepare what you need to do, and this time in fifth grade, I need to work with this five but I have another five that also need me. You are pulled in what you need to do." During the focus group interview, three participants stated "time" in unison.

Limitations of the Study

Phenomenology and differentiation both relate to how the world appears to an individual based on their own experiences (Chiari & Nuzzo, 1996); the depth of this study was limited when participants wanted to show me examples of a lesson or student

project, obviously not visible during a digital audio recording. This phenomenology only examined the descriptive experiences of teachers and did not go in-depth exploring content within a teacher's classroom.

Phenomenology also requires the participants to be conscious of their "lived experiences" (Johnson & Christensen, 2012, p. 395); some participants struggled to answer open-ended questions or required additional time to think of an example of assessment or a lesson that used differentiation. It is unknown if the participants' intrapersonal skills played a role. I did repeat interview questions, ask follow-up questions to redirect, and provide think-time during the interview process, as necessary, to assist the participants.

Although Miles and Huberman (1994) suggested sampling was a limitation of qualitative research, I found 12 participants provided sufficient data for this study. Kanevsky (2011) also suggested participants may respond to questions without truly understanding the questions; the study relied on participants to provide honest and reliable data, and was emphasized at the beginning of each interview. I believe participants provided truthful and relevant data during all interviews. All terminology used was understood.

One limitation included in the study without any affect was omitting current Concordia University students. However, the established relationships of the teacher participants may have limited the study because eight of the 12 participants only had teaching experience at the study site. Diversity, within the staff and students, was not discussed within our interviews; nonetheless, this may limit the generalizability of other

similar studies on differentiation. Transferability may be limited to (K-5) teachers because this study occurred in an elementary school and dependability was limited to the honesty of the participants.

The term bracketing was used by existential phenomenologists as a method for researchers to remove personal prejudices and perceptions from the study process; this also involves the void of judgments from the interviewer (Moustakas, 1994). Bracketing did not occur during this study; a hermeneutic and transcendental phenomenologist would suggest removing interviewer biases was not possible and should be considered a limitation of this study (Pereria, 2012).

Another limitation of this study involved the lack of consideration for how adults learn, a topic throughout the interviews when discussing learned differentiation strategies from past experiences and how to recommend best practices for learning differentiated instruction in the future. This limitation may have altered how participants answered questions pertaining to this topic.

Finally, other limitations addressed during the research process involved the use of an audit trail and member checking (Johnson & Christensen, 2012). The audit trail was a clear outline of the steps taken from the beginning of the research project to the analysis and reporting of findings at the end of the study as outlined in this study. I did not alter the steps outlined in this study; the audit trail and member checking, as I previously discussed in Chapter 3 were not limitations of the study as previous thought. Pseudonyms were used. Miles and Huberman (1994) suggested discussing and thoroughly examining all data to assure it counts towards the analysis process. The research process was

consistent, without variations from participant to participant and did not create supplementary limitations.

Recommendations

The data within this study may be used as the foundation of additional studies on differentiation. Recommendations for future research include expanding this study to include middle school, junior high, or senior high school teachers as participants. By doing so, further data will be collected from content experts of curriculum and teaching strategies. In addition, data could be divided according to years of experience in the classroom to develop a case study; this case study could use both qualitative and quantitative research methods for a greater in-depth look at teacher perceptions and experiences with differentiation; an expanded data collection period throughout one school year, as in an Ethnography, would also be a recommended strategy for future research.

I also recommend including a conversation about participants' learning styles during future qualitative research on teachers' perceptions of differentiation. Participant knowledge of differentiation also solicited concepts for future studies; for example when discussing how teachers best learn differentiated instruction methods, participant Kimberly suggested the following:

> I wish there was a way for them (education mentors or coaches) to come into my classroom and demonstrate it for me. So I think that would be an awesome component for someone who is teaching it (differentiation) and finding a way to come in and help you. Maybe team teaching would work.

One possibility research method could be Grounded Theory allowing up to 30 participants which includes interviews and observations.

Participant Jennifer discussed the possibilities of a comparative research study regarding the effects of staff development opportunities provided by the local school district to those offered by outside vendors and paid for with grant funds – which one produces greater teacher learning and benefits the students the most? Participant Judy commented she had not participated with any staff development opportunities this school year that discussed differentiation. A quantitative study could examine staff development topics throughout multiple school districts and, perhaps, influence future topics according to teacher needs and interests.

A recommended future research topic unique to this site is a mixed model or case study that examines the effects of teacher retention within one school. I discovered eight of the 12 participants of this study had only taught at one school: the study site. In addition, of the collective 128 years participants' teaching experience, 86 years, or 67%, were at one site. How does this affect teacher morale, perceptions, student test scores, learned helplessness, curriculum development, and parent relationships?

Within this study, the teacher participants mentioned several other topics that could potentially develop into future studies. These topics include: collaborating staff development opportunities with other schools for curriculum development, alternate methods of assisting a student throughout the RtI program, the comparison of processes for new teacher hires within the school district, and the effects of technology in the K-5 classrooms.

If teachers' knowledge, usage, and challenges on differentiated instruction were studied, then these ideas may be reviewed in all school districts and generate multiple and diverse learning opportunities for all students. Potential contributions of the study are relevant to all teachers; the significance of this study lies in the belief, practice, and nature of what teachers know about differentiated instruction and how they implement it in the classroom.

Implications

Social Change

Potential implications for positive, social change were rooted in the significance of this study – a group of 12 teachers as participants who described their experiences with differentiated instruction. Implications for social change focused on mindset and training. Administrators and teachers may use these findings to broaden their definitions of differentiation and explore training opportunities. Furthermore, teachers may use this study to gain insight of their personal perceptions on differentiation, identify differentiated materials, and commit to improved pedagogical practices that focus on its versatility in classrooms; teachers may consider the participants' experiences with differentiation and change their own existing classroom environments. These participants enlightened other educators to be reflective and examine their own pedagogical practices. Differentiated instruction is about teachers designing interactions, lessons, and opportunities for students throughout the school day. Students will benefit by being better prepared to make a difference in their world. This study helped narrow gaps in the literature about teacher perceptions of differentiated instruction and its usefulness to

classroom instruction by providing data on a consistent definition of the term, differentiated instruction, and offering evidence and suggestions on how to teach differentiation to classroom teachers.

Theoretical Implications

Education is about helping all students; this study was important to students, parents, teachers, administrators, and superintendents who care about the wellbeing of children and want them to succeed. The teacher participants of this study highlighted an area of our teacher preparation and graduate courses, and perhaps overall university programs that lack concise directions for implementing instructional strategies. The participants confirmed my conceptual framework, as discussed by Vygotsky's (1978) Zone of Proximal Development (ZPD) and Piaget's (1951) cognitive development and constructivism. Throughout the interviews, the participants provided theoretical examples of how the ZPD connected what students independently accomplished on their own with what they accomplished when working with peers, teachers, and technology. The participants underscored the inferences of differentiating curriculum for each student when discussing their definition of the term differentiated instruction. These implications were in alliance with more current refereed literature.

Conclusion

In this hermeneutic, phenomenology I explored elementary (K-5) teachers' perceptions of differentiated instruction by collecting data from 12 teacher participants during interviews at a southwest elementary school located in one of the 20 largest school districts in the United States. All participants were licensed, highly qualified (K-5)

teachers who passed the PPST, PLT test, and the Specialty Area test (Department of Education, 2014). Data were collected and analyzed using open, axial, and selective coding.

Teacher participants collectively defined differentiated instruction similarly to authors and scholars of the referred literature who focused on each student's present learning needs and abilities. But the participants rarely discussed students' interests and learning profiles. In addition, they struggled explaining the multi-layers of differentiation as Hall (2002) discussed as a, "package of strategies" (p. 5); the participants knew various components of differentiation but were challenged to explain how their assessment and instructional strategies directly related to differentiated instruction – they knew it just did.

Equal opinions were given on how participants learned instructional strategies for differentiated instruction: four individuals referenced professional development and teacher in-service training events hosted by the school district, four individuals cited learning about differentiation from academic conversations with colleagues and mentors, and the remaining four participants noted learning about differentiation from repetitive practice and hands-on experiences within their classroom settings. Teachers most commonly implemented differentiation in classrooms through the grouping of students; this was also a common theme within the referred literature. Time was the primary barrier to effectively implementing differentiated instruction.

The participants' passion for the profession was evident throughout all of my interviews; that same passion was also apparent for the topic of differentiated instruction.

Hillier (2011) stated, “Differentiated instruction is not a rote procedure with sequential steps and a prescribed student end product; it is a process that recognizes each teacher is unique as the students and is shaped by the trails and errors of everyday classroom experiences” (p. 53). These participants understood the differentiating process in spite of challenges and obstacles from the profession and local school district.

Differentiated instruction is a pedagogical methodology that increases student achievement. These achievements strengthen society and create a global world that appreciates and understands human differences; such is the value of differentiation in our classrooms. The participants understand that although it may not be easy to fully explain everything they do in a classroom on a day-to-day basis that relates to differentiated instruction, like all learning, they are part of an evolving, unique process and the participants are willing to invest in their students to achieve results.

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Appendix A: School Letter of Cooperation

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May 14, 2014

Christopher Maddox
[redacted]

Mr. Maddox,

Thank you for the interest in [redacted] I received your request and research proposal relating to differentiation-"What do elementary teachers (K-5) know about differentiated instruction?" I am pleased to inform you that we accept your request and grant approval for your study to be conducted at our school.

This letter serves as approval for you to conduct your study at [redacted] during 2014/and or 2015 school year. Since participation in your study is completely voluntary, specific numbers of teachers depend on how many volunteer. You may not contact or interact with students during your stay. If this location does not fit your specific study needs, please feel free to reach out to any of my colleagues for assistance. The Assessment Accountability, Research and School Improvement office can also assist in meeting your needs.

As noted, please honor your request and do no mention our teachers or school by name in your research. I also request that you provide my office with a copy of your study in the 2014/and or 2015 school year when completed.

Please let me know if I may do anything to help you succeed during your visit. We will do our best to accommodate all requests. I may be reached at [redacted] Please reach out to me to schedule your visits and address additional questions, I look forward to speaking with you.

[redacted]

Appendix B: Consent Form for Interview Participants

You are invited to take part in a research study exploring what elementary teachers (K-5) know about differentiated instruction. The researcher is inviting elementary (K-5) teachers to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Christopher Maddox who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to explore how elementary (K-5) teachers define differentiated instruction, if they are provided professional development about differentiation, how they implement differentiated instructional strategies in the classroom, and what barriers are related to implementing differentiation instruction.

Procedures:
If you agree to be in this study, you will be asked to:

- ____Participate in one fifty minute interview held privately in your classroom. An audio recording will be present.
- ____Be available for one ten minute follow-up session with the researcher the next day, as needed. This will occur in your classroom like the original interview.

Here are some sample questions:

1. Define differentiated instruction.
2. What are some of the common strategies you use to differentiate a lesson?
3. Tell me what assessment looks like in your classroom and provide oral examples.
4. How do your volume, tone, attitude, and mood affect your students?

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at [redacted] will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, or being upset. Being in this study would not pose risk to your safety or wellbeing.
Results will be used to determine if teachers need staff development and training events to understand and properly implement differentiated instructional strategies in the classroom. Personal benefits will include a reflective review of pedagogical practices and differentiated instructional strategies.

Payment:
No form of payment or gift will be provided by the Walden University student, [redacted] or the faculty, staff, and administrators of [redacted] if you choose to participate in this study.

Privacy:
Any information you provide will be kept confidential. You will be assigned a pseudonym throughout the study. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by Christopher Maddox in a locked file cabinet of his private home. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via telephone at [redacted] or email at [redacted] or [redacted]. If you want to talk privately about your rights as a participant, you can call [redacted] who can discuss this with you. [redacted].
Walden University's approval number for this study is **05-29-14-0056186** and it expires on May 28, 2015.

The researcher, Christopher Maddox, will give you a copy of this form to keep.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Signature _____

Researcher's Signature _____

Appendix C: Consent Form for Focus Group Participants

You are invited to take part in a research study exploring what elementary teachers (K-5) know about differentiated instruction. The researcher is inviting elementary (K-5) teachers to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Christopher Maddox who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to explore how elementary (K-5) teachers define differentiated instruction, if they are provided professional development about differentiation, how they implement differentiated instructional strategies in the classroom, and what barriers are related to implementing differentiation instruction.

Procedures:
If you agree to be in this study, you will be asked to:

- ____Participate in one fifty minute focus group session held in a private, principal provided conference room. An audio recording will be present.
- ____Be available for one ten minute follow-up session with the researcher the next day, as needed. This will occur in the same location at the same time.

Here are some sample questions:

5. Define differentiated instruction.
6. What are some of the common strategies you use to differentiate a lesson?
7. Tell me what assessment looks like in your classroom and provide oral examples.
8. How do your volume, tone, attitude, and mood affect your students?

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at [redacted] will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, or being upset. Being in this study would not pose risk to your safety or wellbeing.
Results will be used to determine if teachers need staff development and training events to understand and properly implement differentiated instructional strategies in the classroom. Personal benefits will include a reflective review of pedagogical practices and differentiated instructional strategies.

Payment:
No form of payment or gift will be provided by the Walden University student, [redacted], or the faculty, staff, and administrators of [redacted] if you choose to participate in this study.

Privacy:
Any information you provide will be kept confidential. You will be assigned a pseudonym throughout the study. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by Christopher Maddox in a locked file cabinet of his private home. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via telephone at [redacted] or email at [redacted] or [redacted]. If you want to talk privately about your rights as a participant, you can call [redacted].
Walden University's approval number for this study is **05-29-14-0056186** and it expires on May 28, 2015.

The researcher, Christopher Maddox, will give you a copy of this form to keep.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

Participant's Signature

Researcher's Signature

Appendix D: Interview and Focus Group Protocols

The following protocols were developed for qualitative research by Jacob and Furgerson (2012) and followed in this proposal:

1. I chose a topic of interest to me and other educators.
2. I examined current, refereed literature before composing research questions; I used research to develop and guide the questions of this proposal that are grounded in literature, yet different from existing studies.
3. I used a script to assure I did not forget to share important information during the beginning and end of each interview and focus group.
4. I asked only open-ended questions during the data collection period.
5. I began each interview with basic, simple questions to develop a trust between the participant and me; then, I gradually progressed to more challenging questions.
6. The authors suggested using the phrase, "Tell me about . . ." (p. 4) to start a question. I followed this advice on occasion.
7. The objective of this phenomenology was to be descriptive and go in-depth about the participants' experiences. I asked expansive questions that allowed the interviewee to respond to my question in multiple manners.
8. I used prompts during the interview and asked follow-up questions, as necessary.

9. The one-on-one interviews and focus group activity each lasted 50 minutes. I wanted to be respectful of the teachers' time and other commitments during their day or evening.

10. I practiced the interview process with a friend before starting research.

11. A second interview that was no longer than 10 minutes occurred with each participant to clarify data or ask additional information, as needed. The nature of qualitative research is emergent and follow-up information is common with interviews. Johnson and Christensen (2012) described this as a member checking technique.

12. Institutional review board approval was obtained before commencing any part of this proposal (p. 2-6).

Appendix E: Participant Interview Questions

1. Please take a moment to introduce yourself to me. Be sure to tell me:
    a. Your name
    b. Highest academic degree obtained: B.S./B.A., M.Ed., or doctorate
    c. What you teach, your role, at this school
    d. How long have you taught at any location, public or private school in years including the 2014 school year?
    e. How long have you taught at only [redacted] in years including the 2014 school year?
2. How often do you attend professional events, inside and outside this school building? (I will pause for a response.) Do any of these events provide instructional strategies discussing differentiation? If so, Where? (I will pause for a response.) How did you learn about differentiated instruction?
3. How do you define differentiated instruction?
4. What are some of the common strategies you use to differentiate a lesson? (I will listen for comments related to content, process, and products.)
5. Tell me about a lesson that considers differentiation (I will listen for comments related to student readiness, interests, and learning profiles.)
6. How often do students use this computer during the week for instructional purposes and what role does technology play in your ability to differentiate instruction?

7. What is scaffolding and how do you use it in this classroom? (I will listen for comments related to students that know, understand, and do lesson content.)
8. How do your volume, tone, attitude, and mood affect your students?
9. Tell me what assessment looks like in your classroom and provide oral examples. (I will look for examples of pretest assessments.)
10. Regarding the role of the teacher, what is the difference between teaching and test prep?
11. What are the barriers of differentiated instruction?
12. What else you would like to discuss or add to the conversation about differentiated instruction?

Appendix F: Focus Group Questions

1. As we begin, please take a moment to introduce yourself to the group. Be sure to tell us:
    a. Your name
    b. Highest academic degree obtained: B.S./B.A., M.Ed., or doctorate
    c. What you teach, your role, at this school
    d. How long have you taught at any location, public or private school in years including the 2014 school year?
    e. How long have you taught at only [redacted] in years including the 2014 school year?
2. How often do you attend professional events, inside and outside this school building? (I will pause for a response.) Do any of these events provide instructional strategies discussing differentiation? If so, Where? (I will pause for a response.) How did you learn about differentiated instruction?
3. As a group, what definition can we create to define differentiation?
4. Tell me about some of the common strategies used to differentiate a lesson? (I will listen for comments related to content, process, and products.)
5. Tell me about a lesson that considers differentiation (I will listen for comments related to student readiness, interests, and learning profiles.)
6. Tell me what assessment looks like in your classroom and provide oral examples. (I will look for examples of pretest assessments.)

7. Regarding the role of the teacher, what is the difference between teaching and test prep?
8. What are the barriers of differentiated instruction?
9. What else you would like to discuss or add to the conversation about differentiated instruction?

Appendix G: Demographic Chart of Participants

Name (Pseudonym)	Highest Academic Degree	Role at Study Site	Total Years Experience as a Teacher	Total Years Teaching at Study Site
Carol	M.Ed.	Second Grade Teacher	9	1
Tim	M.Ed.	Fourth Grade Teacher	8	8
Kimberly	M.Ed.	Fifth Grade Teacher	8	8
Scott	B.S.	Fifth Grade Teacher	8	8
Brenda	M.Ed.	Fourth Grade Teacher	6	6
Jennifer	M.Ed.	Fifth Grade Teacher	32	12
Judy	M.Ed.	First Grade Teacher	11	5
Amy	M.Ed.	Third Grade Teacher	16	8
Sandra	M.Ed.	Fifth Grade Teacher	12	12
Donna	M.Ed.	First Grade Teacher	6	6
Susan	B.S.	Second Grade Teacher	10	10
Joyce	B.S.	Fourth Grade Teacher	2	2

Appendix H: Interview Transcripts

Carol

Christopher	Hello and thank you for participating and volunteering for today's study; if you could please take a moment and introduce yourself to me. Please be sure to tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Carol	Hello, my name is *Carol* and I have a bachelor's of arts from [redacted]; I have a fake master's - -I did several continuing credit courses when I first got started and they added up to be a masters. I've taught third grade for seven years; my very first year I taught fourth grade and then this year I'm teaching second grade. This is my first year at [redacted].
Christopher	So you've taught nine years total.
Carol	Yes, including this year I guess. I started in 2005.
Christopher	How often do you attend professional events, such as staff developments, inside and outside the school building.
Carol	Quite a bit, more so in the past few years since I taught at at-risk schools and we had a lot of professional development. I also did summer classes and I also did after school classes. Also, they would provide subs so we could go to additional training during the school day.
Christopher	As far as this school year, do you think you go once a month or every three months?
Carol	I would say this year more about once every month. I haven't attended as many this year because there aren't as many opportunities.
Christopher	Do any of these trainings or staff development opportunities ever focus on or discuss strategies regarding differentiation?

Carol	Yes, we actually had quite a bit at [redacted] specifically designed for that.
Christopher	How about this school year?
Carol	This school year I have not.
Christopher	How did you learn about differentiation?
Carol	I would say through your school district because they give me strategies that help a specific classroom. When you get into it, you'll see every year is different too. I feel it depends a lot on the kids you are working with. Like this year for example, I have a lot of really high kids and a lot of really, really, low kids. And there are not so many in the middle; then there are other years where you have more of an average class and you don't have any high kids – they are mostly average kids with a few below level. So I feel like it depends a lot on the year for different techniques on what you need to do.
Christopher	How would you define differentiated instruction?
Carol	Pretty much reaching every child and what they need. So depending (*sic*) your high kids sometimes may need to take it up a couple levels, use more non-fiction texts and higher vocabulary. And then sometimes with your lower kids work more on the phonic skills before they can reach comprehension. I feel like it is more dealing with whatever your child needs.
Christopher	You teach second grade right now?
Carol	Uh hum (yes).
Christopher	What are some common strategies you use to differentiate a lesson?
Carol	I use quite a few strategies. Sometimes depending on a lesson, it is more scaffolding and getting kids through the content because I feel they also need to be introduced to on grade level texts as well. Also in math, sometimes if it is fractions, they may need that specific skill. Where if it is with addition or subtraction, I can tone it down to an easier problem at their grade level, then you can do

	that. So I feel it kind of depends on the lesson. I use different materials and I give them different types of problems. Sometimes it is just chunking it up in pieces or if it is for the higher kids, sometimes I give them more challenging problems.
Christopher	Tell me about a specific lesson that considered differentiation.
Carol	OK, sure. I was teaching my kids about strategies on how to add and subtract, so they had to not only solve the problem in one way, but solve it in three different ways using three different strategies and then they had to explain the strategies. My lower students weren't quite ready for the double digits so they stayed with the single digits and my higher kids were ready to move on so they were able to do a three digit number with regrouping. The lower kids were simply adding; so pretty much giving the students the right problem that meets their needs, but also scaffolding them along, reminding them of the process as well.
Christopher	How often do students use computers during the week for instructional purposes?
Carol	They use them every day during reading groups for Compass Learning; they don't always get to it every day, but I would say about 15 minutes on average per day.
Christopher	What role does technology play in your ability to differentiate a lesson?
Carol	Well, like for example, if they are doing their reading, Compass Learning actually differentiates for you. It gives them a pretest so we know what level they are at. Then it works with them at their level for instruction. The data drives my lesson plans.
Christopher	Is Compass Learning a software program?
Carol	Yes, it is within the whole district.
Christopher	You've mentioned scaffolding a couple of times. What is scaffolding?

Carol	Scaffolding is just helping them along; giving them assistance to work it out with them, giving them step by step, and helping them along with the problem until they are ready to do it on their own.
Christopher	How does your volume, tone, attitude, even your mood affect your students?
Carol	I think when you are excited about things I think they are more excited about things. So if they know you are excited about learning a new topic and really into it, whereas if they see you are just monotone and you don't really care about it, then they get really bored.
Christopher	What if you came to work one morning and you had a headache, or you weren't at your best, how would you handle that with your students? Would you tell them, would you not tell them?
Carol	I normally tell my kids if I have a headache; especially the little guys, they are so patient with you and so understanding. And so I tell them, I have a headache; you need to be extra quite today or I am not feeling well. And I feel they actually behave even better.
Christopher	Tell me what assessment looks like in your classroom.
Carol	We do several different types of assessment; sometimes I ask questions of do you understand it or sometimes I just walk around and look. I also use whiteboards for students to hold up and show me their answers. Then I can see right there who needs extra help and who doesn't so right then I can take them back and assist them with me and scaffold them along with the problems they are working on. We do a lot of reading assessments to see what levels they are at so we know what reading groups need to work with. And also I use core phonics survey; it tells me what phonic gaps they have so I can know if they are missing the short e sound, I know where to work with them. We do the DRA assessment which is a general reading assessment asking if they are reading on grade level or are they far below. There are numbers so I can see what level they are at. That helps me plan out my reading groups so I know what to work with them on. And then I also do assessment for grades such as normal math tests. Like a lot of times I just gave

them a fraction test and it was higher level thinking; a third of the class really got it because it was that deep thinking so that it tells me what I need to reteach.

Christopher Do students ever do projects or skits for assessment?

Carol Oh yes, actually right now they are working on a book project; the student gets to read a book on their level and I told my higher kids to pick a chapter book. Then everyone gets to do a project according to the book they read. We did how to projects where the student had to write and show the class how to do something. So we definitely do quite a few projects too.

Christopher So the student gets to choose a book of their choice.

Carol Uh hum, yes. Then also I also like to do the Kagan Strategies for Learning. It is so nice if I don't have time to scaffold every kid through, the way it works it has the higher kids and lower ability partner so it is a good match. The kids learn even more when they are teaching the content to a classmate and the lower kids how to do it. And then sometimes, they lower kids are teaching the higher kids how to do something because they all have different strengths. And it really nice to hear their ideas they get from one another. I feel that this helps them to master the concept. Sometimes they understand their peers more than their teacher trying to tell them the same thing.

Christopher Regarding the role of the teacher, what is the difference between test prep and teaching?

Carol One more time

Christopher Regarding the role of the teacher, what is the difference between test prep and teaching?

(Silence)

Christopher The idea of this question comes from the idea of Now Child Left Behind laws. Not too long ago, we would hear teachers on the news say they did not have time to teach because all they did was

	test prepping. Do you think there is a difference between the two? If so, what?
Carol	Thank you . . . this year I am teaching second grade which does a lot less of that, which is nice. And last year I taught the intermediate grade where we had to worry about the test prep. I do feel like the test prep was teaching them what was on the test which is a part of going through school. Kids do need to be taught actual test prep in order to do well on the test. I do feel like that should be part of teaching, but so do take that to a level that is overboard. If all you ever do is test prep, then students aren't necessarily learning. I feel like also it takes away, at my old school they told us not to teach science and social studies, just try to integrate it because they were worried about the test. We do test for science now, but I don't think it counts for making AYP.
Christopher	Okay
Carol	And then also I remember for a while they were telling us to only work with the bubble kids because they were only worried about them passing the test. And so the tutoring programs, extra money they had would go towards the bubble kids.
Christopher	Define bubble kids
Carol	The bubble kids are the kids who are just slightly below average, just almost ready to pass the test. It didn't matter if you got the really high score. The high kids are going to pass no matter what, so they said. Don't worry about them.
Christopher	How do you think that affects the other students? The high students and the low students (*sic*)?
Carol	I feel like it was the worst; to me, I got angry about the low students because I felt that it was unfair that they did not get the opportunity to go to tutoring because they are the ones who really need it. And they were just worried about the average or just below average kids. That part made me upset. I never ignored the lower kids, but that's what they were telling us to do.
Christopher	Are they, the administrators?

Carol	Yes, at my old school. And I'm sure their bosses and their bosses. That's how people interpreted passing No Child Left Behind.
Christopher	How is teaching a part of test prep? By that I mean, if you are teaching the entire common core in the first place, you are actually teaching to the test?
Carol	The problem that I saw was that the Common Core didn't match the CRTs. The Common Core is a lot of higher level thinking that doesn't match the multiple choice tests of higher level thinking. So my instruction wasn't really matching the test. So, I saw problems there.
Christopher	What are the barriers or challenges of differentiated instruction from a teacher perspective?
Carol	I think time – having the time to gather all of the materials for a kid. I think for the higher grade level you teach, the harder it is. The reason why is the levels are (*sic*) normally even more split up whereas every year I've gone down a grade it is easier to differentiate since their levels are little bit more similar to each other. For fifth grade standards, the work is so hard for those low kids, there is such a huge gap. It is hard to find the same material at their level to do a good job of differentiating.
Christopher	Anything else related to time.
Carol	For me, I feel that time is the hardest part. I know a lot of teachers also have a hard time with the grading aspect of it. Because they think the low kids should have a chance to work at the at grade level so they don't what to differentiate it at the at-grade level so the grades are on grade with other kids.
Christopher	Anything else you would like to add to the conversation of differentiation?
Carol	I think it is very important – I try my best to do it. Sometimes it is hard to reach every kid. Once the students get up to the middle school and high school, the classes are differentiated already.
Christopher	Thank you very much.

Tim

Christopher	Hello and thank you for participating and volunteering for today's study; if you could please take a moment and introduce yourself to me. Please be sure to tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Tim	Hello, my name is *Tim*. My highest degree is I am currently working on my second master's degree in administration. I completed a previous master's in education. I've been teaching for eight years and I've been teaching at [redacted] all of those eight years – always fourth grade at this public school.
Christopher	How often do you attend professional events, such as staff developments, inside and outside the school building.
Tim	Well of course whatever is scheduled by the school district her at my school I will attend. So that is between four to six professional development days that are required. In additional I've done four professional development days outside the school day this year. Some are on the weekend, some are afterschool, or even during the summer. So I try to do between three and six additional professional development.
Christopher	Do any of these professional development days include strategies that discuss differentiated instruction?
Tim	Lately, they have been mostly about the new curriculum that is coming through the district or things about technology that I've attended. Not really, per say, about specific strategies on differentiated instruction.
Christopher	Do they provide any kind of instructional strategies?
Tim	Yes, they would provide specific strategies on how to present or how to sue the technology in the classroom. Like with Smart Board or transponders – stuff like that.

Christopher	How did you learn about differentiated instruction?
Tim	I learned about differentiated instruction – for me, I really didn't know what differentiated instruction was my first year of teaching. I just knew I had to go into the classroom and learn about my kids. I had to figure out how each individual kid learns and how to tailor my teaching around that.
Christopher	How did you learn about differentiated instruction?
Tim	I learned it through professional development in the district, a long time ago. And through other teachers in my grade level who are senior teachers who taught me and suggested that maybe I should do a whole group lesson, and then break off into smaller groups and teach those kids individually one on one. May you should differentiate reading abilities for the high and low readers. So I learned from other teachers on staff of teachers that were here before me.
Christopher	How do you define differentiated instruction?
Tim	I really define it as tailoring my teaching and, somewhat the curriculum, to each individual student's need. That's how I define it as. Listening to the kids and finding out how they learn and taking that information and putting it into my teaching and how the kids best respond to it.
Christopher	What are some of the common strategies you use to differentiate a lesson?
Tim	Well all of my lessons basically have the whole group component, then I break them off into small groups. So I will do a whole group lesson, for example on story elements. And then I will pull small groups and reteach the information I just taught to the whole group within the small group so they get a better understanding and a different approach to it. I like the leveled reading, as I said. I like the different levels in the classroom. Group, share, pair – turning to each other and use student learning like that (*sic*). Those are the big ones I like to use. With technology, I like to use visual and

	audio; I do a lot of stuff on tape sometimes. I also use music as instruction as well.
Christopher	Can you think of a specific lesson that you differentiated for your students?
Tim	Specifically, recently, let me think. Well I did a whole group lesson on figurative language. We were talking about similes and metaphors. As a whole group, we discussed what the difference between a simile and a metaphor is. Ok, a simile uses the word s like or as to compare, a metaphor does not. So from whole group I went to kids individually as they think-pair-share with their partner and they came up with different examples of similes or metaphors using each other's ideas. Maybe this phrase is a simile; maybe this one is a metaphor. Another one I recently did was this space thing I am doing right now. Where a kid has to do a thing on a planet; I gave them the option of doing a PowerPoint, a Smart Board presentation, an essay, research project, I said go with it, run with it. I gave them time to research it in class, but it was up to them to prepare whatever they wanted to prepare.
Christopher	Did student choose their plant, or was it assigned?
Tim	No, they chose everything. They chose the planet, how presented it, how they wanted to research it.
Christopher	Are there lots of opportunities for students, according to their learning profile, or their interests, to pick topics to study?
Tim	In our curriculum?
Christopher	In your classroom?
Tim	In my classroom I try to let them do as much as I can, but I also have to follow what is mandated. But I do give them choices of what they want to invest their time in because they get excited when they choose. If they can't get to choose – having that investment in their own learning is key (*sic*).
Christopher	How often do students use computers . . .
Tim	Every day

Christopher	. . . .in the classroom for instructional purposes.
Tim	Every day.
Christopher	Every student every day.
Tim	yep.
Christopher	What role does technology play in your ability to differentiate a lesson?
Tim	I use it as an aide and as a helpful tool to help me teach. Again, the kids get on it every day and they do research and Compass Learning which is a component of the ELL program that is tailored towards their learning abilities. I use my Smart Board to do internet lessons. I pull up the internet connect with real world life stuff. I use articles and the CNN website sometimes. Pretty much every day I am on technology for a lesson. I just kind of do it.
Christopher	What is scaffolding?
Tim	I think it is building background and previous knowledge for the kids. It is getting to know what they know and building off that. That's what I think. Taking the kids' knowledge and then using it in my lesson planning and my curriculum to help them.
Christopher	How does your volume, tone, attitude, and mood affect your students?
Tim	I notice right away if I start to raise my voice, the kids react differently. If you are not a positive person with them and establish a good repose, it's noticeable. If they kids don't care about you and you are just yelling at them and you are miserable being here, then that's how your class will be.
Christopher	What if you come to school with a headache or you are not at your best, what do you do?
Tim	I tell them. If I feel bad, made a mistake, or need to redirect, I tell them. We talk about it. This is the age where we talk about it.
Christopher	What does assessment look like in your classroom?

Tim	We have all kinds of assessment in my classroom. I have a checklist with the students listed so I don't miss anyone. Students write about things using a prompt and answering things. These are written assessments. Compass Learning is a big assessment for me that guides what I do in the future.
Christopher	Regarding the role of the teacher, what is the difference between test prep and teaching?
Tim	As a teacher, my goal is to get them to learn required material by the end of the year, this is a goal in the back of my mind. My goal is teaching and not testing. Testing, I use it to see where I need to go from there. With the talk of how teachers are going to be evaluated, this is a scary thing. We want students to do well on tests, and with teachers worried about their jobs, we want students to do well. It is a struggle.
Christopher	What do you think are the challenges or barriers of differentiated instruction?
Tim	Time, and if I could, I would have less students. I could do so much more with smaller groups. Sometimes materials since I am trying to find what works with different groups; and are we allowed to use the material that we find? It is a challenge.
Christopher	Anything else you would like to add or discuss regarding the topic of differentiated instruction?
Tim	I can't think of anything.
Christopher	Thank you for your time
Tim	You're welcome.

Kimberly

Christopher	Hello and thank you for participating and volunteering for today's study; if you could please take a moment and introduce yourself to me. Please be sure to tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Kimberly	Hi, my name is *Kimberly*. My highest degree is a master's in education. I teach fifth grade. I have taught for 8 years and all of them have been here at [redacted].
Christopher	How often do you attend professional events, such as staff development or teacher in-services inside and outside of this building?
Kimberly	This year has been more limited, but I've attended five so far this year. Over the past few years I've done my plus 32 credits, so, pretty frequently.
Christopher	Do any of these events or services discuss instructional strategies about differentiation?
Kimberly	Always! Most of them that are technology that I took recently discussing the interactive white board and things like that mention it. But they do not get into it in depth. I've done a lot of science courses that are related to differentiation because that is a hard one to differentiate I think. If I am presenting the content, the students typically do an assignment related to the content I just taught, that is really hard to differentiate for me, anyways.
Christopher	How did you learn about differentiated instruction?
Kimberly	I do think that professional development classes are good, but a lot of times they are not really taught by someone who has recently been in the classroom and they don't truly remember how to differentiate a lesson on a day-to-day basis. They talk about it as a really great idea, but when you get down to the issue, you have no time, you've got so many different levels of kids that it is not

	always applicable. They give you great ideas, but they are not practical strategies. It just seems like sometimes I think, how am I going to make that work? I wish there was a way for them to come into my classroom and demonstrate it for me. So I think that would be an awesome component for someone who is teaching it and finding a way to come in and help you. Maybe team teaching would work.
Christopher	You learned about DI from staff development? So you think the best way for teachers to learn about differentiation is for someone to come into your classroom and model it or someone to shadow, or even observe.
Kimberly	Yeah, exactly! Whatever the teacher is most comfortable with; they model, observe, and give you suggestions on how to change your instruction.
Christopher	How would define differentiated instruction?
Kimberly	I think making content accessible for all students. Sometimes you are going to have those accelerated students and you need to take those steps above; but you are going to have those special ed (education) students or even those students who struggle with different kinds of – for math or in reading. You've got to find ways that work for each kid which is not easy.
Christopher	What are some common strategies that you use to differentiate a lesson, just in general?
Kimberly	Common strategies for me is small grouping and finding ways to put kids together who can help each other. There is only so much I can do and then pulling groups back to work with me. So I can see what concepts they are getting and which ones pull them apart and the students who get nothing from the whole group instruction. So meeting with them and trying to fill in those gaps. So small grouping is the best way I can meet their needs.
Christopher	Do you differentiate lessons at all by process of which students learn or an end product?

Kimberly	Yes, absolutely! If it is a big project type thing most definitely (*sic*). I put groups of kids together based on ability levels, but not always. Sometimes it is mixed ability groups that way they can help each other. Their ability to do – some students are really good as a hands-on type learner, I might put them with someone who is verbal so they work together and one is better than the other.
Christopher	How do you understand a student's learning preferences or profile?
Kimberly	I used to give a survey I got in college years ago, but I've learned from working in small groups I figured out very quickly how my students learn and I just become accustomed to analyzing my kids and getting to know them personally through different, you know, talking individually with them when I can. But you get to know them pretty quick once you have given as assessment – you learn it, you see it.
Christopher	When do you do that?
Kimberly	It is usually the beginning of the year during the first couple of weeks during the get to know you activities in the class. And I talk to the parents too. I give the parents a survey every year asking how the student learns best, what kind of activities do they enjoy. That says a lot. If my kid loves to read or play sports you can kind of put those in categories as well.
Christopher	So you give the parents an interest survey, not the students?
Kimberly	Yes, more so now.
Christopher	Can you think of, or tell me about a lesson that considered differentiated instruction?
Kimberly	For example, when we were working on, let's say, math and volume. When I was teaching that, I had a good range of learners in here. I had to cater to their ability levels. I have some amazing [redacted] students so I taught volume in unit cubes, starting there. So I gave them a box and I gave them unit cubes. We talked about it. Then I said why don't you guys try to figure it out and I let them be independent because they have the ability to kind of learn themselves. The on level kids, they ones right there, almost above

	the special ed (education) kids, I kind of gave them the cubes and guided them a little bit more. I didn't give them a shape and have them figure it out. I guided them through saying, you know, your length is this, your width is this, what is your volume? How do you find it with cubes? With my lowest kids, I brought them over with me. We sat down and kind of played with the cubes and I had them build on their own and we explored. I said, we are going to take your box apart now and count each cube; how many cubes fit into your box? I walked them through step by step together. So that's an example of the differentiation I would do. I like for the higher kids to really explore before I go; later on I would meet with them and find out how they did. If there are any misconceptions there, I would work with them. I would give them a next step assignment.
Christopher	How often do students use the computers during the school week for instruction?
Kimberly	Any subject at all?
Christopher	Yes, for instructional purposes for any subject?
Kimberly	For reading, I would say I do small grouping so they are on it at least every day. For math, it is pretty limited.
Christopher	Every day?
Kimberly	Yes, for reading every day, but for math it is limited.
Christopher	What role does technology play for you, in providing differentiated instruction?
Kimberly	How does it help me provide it?
Christopher	Yes
Kimberly	Oh my God, I love it because we have an interactive board which helps put some things in a different dimension for some kids. But also using websites that bring up abstract concepts that makes them more concrete (*sic*). It gives kids a chance to see fractions in 3-D because I could draw on my interactive board and pull up pictures of fractional pieces and parts and it made it a lot easier. I love it, I couldn't teach without it.

Christopher	What is scaffolding?
Kimberly	Scaffolding, for me, is really giving them, helping them understand things and guiding them from there. I give them the basis and see where they need to go and far as help. I think scaffolding is helping the student until they don't need it anymore until they get the concept and they can kind of go from there. That's probably not the clinical definition or the theorists and all of that kind of stuff, but for real life, that's how I kind of see it. I help build the foundation and they help build the rest of the building.
Christopher	How does your volume, tone, attitude, even your mood affect your students?
Kimberly	(laughter). That's a funny question actually; I think it does sometimes. I try not to let it, but that's why I plan at least a week in advance so I can put my own stuff behind. I genuinely love my job, so I think my excitement for learning, once I get into the zone, my mood and stuff are really general. We are in this together, we are having fun. I think with math, I personally am not comfortable with math. I get excited with reading. The students see that, and they get excited and we get into books together. With math, I am apprehensive, so I think that I go over the top to teach it better. So because of my straight up fear of that, I think I am a better teacher for it because I am always saying, let's go through it step by step and then the student goes through it by themselves and I also go through it with them and I pull who's not getting it because the kid who did not get number six is needing that differentiation.
Christopher	What if you came to work with a headache or simply not feeling well. Would you tell your students, would you not tell them?
Kimberly	I think in the past I have; I've been like maybe I am losing my voice so we are not going to do as much discussion today. When you are getting ill, but you feel like you can work, you know, you are just a little low. With headaches and stuff, I get a little grouchy from time to time especially when their behaviors are causing my headaches. Then yes, it changes my instruction quite a bit.
Christopher	Tell me what assessment looks like in your classroom?

Kimberly	It definitely varies, but it is traditionally a paper and pencil type task. I try to do teacher created assessments rather than program assessments since I know what I've taught according to the program I followed. The auto program may not fit their needs or discuss things that are not relevant. Sometimes where assessment is in small groups, I will pull kids over for different things and ask them to explain this to me or I will go around individually for writing. This is what I will do to see how things are going. I can read their final draft for writing, but maybe some of the language concepts aren't being demonstrated so I can see quickly what we need to work on. My assessment absolutely drives my instruction. I know teachers get away from that because they are following a program or have testing coming up. But for me, it is what I need to teach, I don't want to wait until the test to say, wow, you all failed it and clearly it is all my fault. I don't want that to happen.
Christopher	Do you use any methods to preassess?
Kimberly	I do, but generally it is pretty short. Generally five questions based on the standards we are going to focus on. For example with volume, I asked what is area what is perimeter? Students need that foundation before you can even get to understand volume. I don't do as much as I probably should; I do quizzes along the way and I use that information for more. It helps me know if I can move on or go back.
Christopher	Regarding the role of the teacher, what is the difference between teaching and test prep?
Kimberly	Everything (*sic*). Um, teaching is engaging with kids and making things more authentic using their problems and having them discuss with me. That's what I do for reading groups. For example, the requirement is to come up with a question as they read chapter two. So when it comes to discussion time, they are not my questions, but questions from the students. Or maybe it is an article we read; instead of asking what is the setting, I will guide the students to discover the setting through discussion. Test prep is OK, number one, what did you guys get for that. We do some test prep through games and stuff, and I think it is absolutely essential

	for the high stakes testing and stuff, to remind them this is what we do to remind them this is how we answer this type of choice question an things like that. We do it in games. I don't like to have the kids sit. We move a lot. I've done the packets in the past of going over the information, but the kids hate it and so do I. We have to move and go over the information.
Christopher	Do students have the opportunity to choose topics or novels to read for units? Do students have a choice?
Kimberly	Absolutely, with reading I get to the point where I give them certain novels and kids won't naturally choose historical fiction. So I may choose one that I know is good and I differentiate it on reading levels, interests, and options for different levels. I may have three books and whichever one gets picked, I go with it and sometimes with math I get into a conversation with when I am I going to use that fraction or when am I going to use that mixed number. OK, guess what, let's have a conversation about it. I want to double my chocolate chip cookie recipe. That wasn't in my lesson plan, but we still talk about it because they brought it up. For writing, I give them a free write, so they choose what they write and it gets really fun. There aren't as many choices, but for me the best engagement I get is when they have a choice.
Christopher	What do you think are the barriers of differentiated instruction?
Kimberly	The barriers are time with all capital letters! I am trying to reach all kids and that's not always easy to do. So I am trying to cram six kids together with those learning styles and abilities and they are not all the same. I think finding materials for all different levels is not easy. I have a kid who is probably a second grade reading level. I am not that good at teaching phonics. I've always taught intermediate grades. So he needs to have materials that I don't always have immediate access to in my classroom. So I think materials and time are the biggest issues.
Christopher	Is there anything else you would like to add to the conversation of differentiated instruction?
Kimberly	No, I think I said it.

Christopher OK, thank you for your time.

Scott

Christopher	Hello and thank you for participating and volunteering for today's study; if you could please take a moment and introduce yourself to me. Please be sure to tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Scott	Hi, my name is *Scott*. I earned a bachelor of science from [redacted]; at this school I teach fifth grade general education. I've been teaching for eight years and all of them at [redacted].
Christopher	How often do you attend professional events, inside and outside this school building?
Scott	It depends on what is available, but every month we have something. Every few weeks.
Christopher	Do any of these events provide instructional strategies about differentiated instruction? Or do they discuss differentiated instruction, specifically?
Scott	Yes, I think so a lot. With the RTI, it is discussed quite a bit to meet the needs of those students.
Christopher	Can you think of any specific examples that may include this conversation?

(Interruption from front office intercom)

Scott	Sorry about that (*sic*). The last staff development I went to was technology based. One of the discussions was how do you differentiate with different groups when you are creating lesson using the Smart Board, how do you make it accessible for all students.
Christopher	How did you learn about differentiated instruction? As teacher, what is the best way to learn about it?

Scott	As with anything with the teacher, once you get into the lesson, as much as you go to school, it is just as much about working and put into the fire a little bit. I think sitting down with people and talking about that afterwards is more beneficial than reading about it in a text. I think the experience of teaching, you learn more from that than anything else.
Christopher	How do you define differentiated instruction?
Scott	When the instruction is geared towards the different abilities and needs and anything that those students need gearing that instruction towards those individuals which is different across the board in the classroom (*sic*).
Christopher	What are some the strategies, specially, you use to differentiate a lesson?
Scott	I think one of them I try to do, to begin with, is make sure the lesson is accessible, for all students wherever they are coming in. Providing a starting point to bring them up from a similar plane so when I am introducing a topic, I am not automatically excluding some of the students who may not understand a concept. I am not skipping steps, and making sure that as I expand on a lesson, such as in math or reading or something, I look at the areas where a student may individually need help and look at specific goals for those students and make sure they have the gears towards that. In the same turns that they may need pushed towards something or if I am working with students on advanced goals, it is something I am working on with - with peers (*sic*), I will pull a lot of small groups and rely on their ability to do independent practice. I will make sure they are able to have practice and do the modeled activities so the independent practice is appropriate for them to practice the skills that are geared towards them and the goals that they have for themselves. That's kind of a roundabout answer.
Christopher	I'll try to synthesize your strategies; so you discussed small grouping, modeling and independent practice.
Scott	With modeling and independent practice, you have to continually look at where are they at, what are they doing and what do I need

	to go over. Within small groups I am doing that. A lot of times if we are doing certain types of practice and I see something students are missing, I will do a quick informal assessment and pull students and find out where the misconceptions are coming from (*sic*). When we do fractions, there are certain areas that students really need help with division, so we, then pull those students to work with. I poll them.
Christopher	How do you poll them?
Scott	For a lot of them, if we have time for independent practice, or something, I can pull them to the front table in the room. I poll them using post it notes, or we use the front board and we have voters so I can get a quick glimpse of who is getting it and see individualized students. Polling students using the Smart Board, I have access to polling tools. It is something I have access to but they can't see each other's answers. I constant monitor to see what others are doing; with the technology, we can get quick responses and data for students to vote on the concept. It helps and I have the special ed (education) teacher come in and help with grouping and things like that.
Christopher	Can you think of specific lesson that you used differentiation?
Scott	I think in reading, we are kind of constantly, moving. Some students are working on fluency. They are having trouble with their fluency which affects their comprehension, so I will pull groups and let the student listen to themselves as a recording so they hear themselves reading at a certain pace. I also model so they hear the information read fluently to begin with and it aides in the comprehension. Other students have the fluency and struggle with the comprehension. So in reading, it is constantly; even looking at some of the more formal assessments we do in the spring, they don't really tell the story of where a student is struggling or where they are losing some of the comprehension. Recently, we've been doing reading from human rights documents, so some students need help with vocabulary and strategies to help the student focus on vocabulary. Where other students kind of need help with the

	main idea- -getting the gist of what it is about. Groups help with these specific areas for each student.
Christopher	How often do students use the computer during the week for instructional purposes?
Scott	We, umm, quite a bit (*sic*). We try to get on quite a bit. I did Compass Learning for reading so students got on the computer every day for that. But even, now, we still use the computers a lot where students are on the computer at least two or three days a week.
Christopher	What role does technology play in your role to differentiate a lesson?
Scott	It can be useful because you have, even using different programs, you have tons if ideas. It allows me to provide different prospective through the internet. For differentiating, it helps because we have Compass Learning. The results of these student activities help direct me for next steps. I can put specific lessons on for the students, something they need additional support with, but it is not something we are doing whole group.
Christopher	What is scaffolding?
Scott	Scaffolding is basically starting from the bottom and making sure you have that strong base to build up from. It is making sure they have the background, they have the modeling, and the things they need, to grow as a learner.
Christopher	How do you use scaffolding in the classroom?
Scott	Making sure we have a common understanding when going into a lesson so we can move up to something else. It may seem basic, but you want to make sure students have that (*sic*) so they don't fall behind. Making sure everything is concrete before you move on. If it is not, that's where you use the differentiated instruction to help certain students because they can't build up any further until they understand these basic concepts.

Christopher	Changing gears just a bit: how do you think you volume, tone, or mood affect your students?
Scott	Probably a lot (laughter). I think it depends; I think this year has been a little bit more of a challenge. It does, it affects them a lot.
Christopher	For example, if you come into school with a headache, or something similar, would you tell your students you have a headache?
Scott	No, I'm pretty even keel when it comes to that kind of stuff. I don't think I come off as a bad day or good day.
Christopher	Thank you. What does assessment look like in your classroom? How do you assess your students?
Scott	You mean like a specific question I would ask?
Christopher	No, I mean are your assessments always paper and pencil tasks, or do you . . . .
Scott	Oh, I try to vary it just because you have all of those different learners and the different styles in which they present information. I use paper and pencil the most for written response. But we also do things when working in groups. In social studies, they were working on colonies and they had to present their colony in a play and make up some kind of theme to cover the main ideas of the text. We've done fish bowl discussions where students become experts in an area and teach others. So I assess students what they become an expert on, and then we have group discussions where they share. Sometimes it is informal.
Christopher	Regarding the fish bowl, is the final product a presentation?
Scott	What I am looking for is a discussion, their participation and knowledge of the content they are giving. Typically it is six students and they discuss; sometimes they have a written response. It goes along with the information provided from another group. Your expertise is what you are orally presenting to the discussion and your expertise is on the topic. They enjoy that as a way to learn information; I think they like to learn from one another. And

	again, it give them each the opportunity where I think they find what is important to them and you see responses from different students to express however they want. I am completely out of the discussion; they have their topic and they create the discussion. With each group it goes differently; it is interesting but they learn a lot from it.
Christopher	Earlier you spoke of polling the students; do you consider that a form of assessment?
Scott	Yeah, I mean it is not something in the gradebook, but it is a quick formative assessment to see where they are at, their understanding.
Christopher	Regarding the role of the teacher, what do you think the difference is between teaching and test prep?
Scott	I think it relates to where you set your goals. If you set your goals for test prep, you are looking for an answer. If you are teaching, you are looking for them to understand a concept, not just cite an answer.
Christopher	What do you think are the barriers or challenges of differentiated instruction?
Scott	Time. You don't have time for all of them. I am one person and I have a class of students with 30 different needs. Just finding the time to meet those students needs individually. That is the hardest thing. When you have technology, it helps, but it is not the same as sitting down with each student all the time.
Christopher	Anything else you want to add to the conversation if differentiated instruction?
Scott	One of the things with differentiated instruction, during my student teaching, I taught at a school where learning was placed upon the student; it was about making sure the student took responsibility for their work. It was important to me when we set the classroom atmosphere for the learner. It was a different setting with a lot of things going on with multiple groups; I liked the way that worked with students on different levels with lots of support. The teacher was always available and monitored where the student was at.

	That's important for the part of differentiated instruction. I can't help them unless I understand what their goals and needs are.
Christopher	Well thank you and I appreciate your time.

Brenda

Christopher	Thank you for volunteering to participate today, I appreciate your help in finding out what teachers know about differentiation. Please tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Brenda	Hello My name is *Brenda*; the highest degree I have is a master's in education. I teach fourth grade at [redacted]; I have taught for six years total, and I have taught at [redacted] for 6 years. This is the only school I've been at. I student taught here as well.
Christopher	Where did you go for your bachelor's?
Brenda	[redacted]
Christopher	How often do you attend professional events, such as staff development and teacher in-services, inside and outside this building?
Brenda	Professional development, probably, maybe once or twice during the school year (*sic*). Typically they do a lot for us during the summer, so I usually go to a week long summer program. I just finished my master's about a year ago, so I just finished taking classes for that and I didn't do much outside of that.
Christopher	Do any of these staff development events provide instructional strategies that discuss differentiation?
Brenda	Yeah, they don't specifically deal with differentiation. Technology is where the district is headed, so they put an emphasis on that.
Christopher	How did you learn about differentiation?
Brenda	I think that professional development was pretty good for me, even teacher modeling, teachers going in an observing others and seeing the types of strategies they use is really beneficial. We went this year to observe a reading program being done and it was really helpful.

Christopher	How do you define differentiated instruction?
Brenda	To me, differentiated instruction would be to meet the needs of all the students in your class based on the different levels they are at. Specially grouping them (students) based on where they are at and the needs that need to be met.
Christopher	So grouping is one strategy, can you think of other strategies you use to differentiate a lesson?
Brenda	Different types of, like, assignments given depending on their levels. Sometimes a kid would need a [redacted] assignment, so they would something that is at a little higher level, or sometimes a kid may need help at a lower level. But pretty much grouping is what I focus on.
Christopher	Can you think of a specific lesson that considers differentiation?
Brenda	I would say any math lesson that we do. There will always be those kids that pick it up right away, so they need to be enriched. They are going to need something right away; they are going to finish the assignment quickly, so they are going to need something that going beyond the initial learning in the classroom. And I also have those kids that are going to take forever to get it and they are going to need additional teaching. I will have to pull them and I will have to go back a couple of steps to figure out the concepts.
Christopher	How often do students use computers during the week for instructional purposes?
Brenda	My students use computers daily.
Christopher	For all subjects?
Brenda	Yeah, mostly math and language arts. In the pods, we have computers right outside my door so it makes it easy.
Christopher	What role do you think technology plays to differentiate a lesson?
Brenda	I think technology plays a bog role. With the computer component the kids use, it speaks on their level, so they have their own learning path after they take the initial assessment. So everything is

	geared towards where they are at and it works on filling the holes that need to be filled for the enrichment that they need.
Christopher	Is it a software program?
Brenda	We use Compass Learning at our school. So at the beginning of each year, the kids will take an assessment and it creates a learning path for them for all subjects, and then it adjusts depending on how they are doing. I can adjust too according to what I see the students do.
Christopher	So they are required to do Compass Learning every day?
Brenda	They do it every day within academic rotations with different groups. They can also do it at home.
Christopher	Do you ever assign Compass Learning as homework?
Brenda	I don't assign it as homework because, you would think all of the kids might have a computer at home, but they might not or internet access.
Christopher	What is scaffolding?
Brenda	To me, scaffolding would be to build a lesson, and then kind of go – depending on where the kids are at or what I am noticing, either go up or come down, depending on the type of response I am getting from them. So it is kind of a stepping stone to build a lesson and seeing where my class is at and where the groups are at.
Christopher	You mentioned, depending on what response you get from them. Do you alter how you receive responses from them?
Brenda	It can be anything from classroom observations or a really quick, on a post-it note to tell me what you know about this and then collect them. Even grading an assignment, just a quick assessment to see where they are really at.
Christopher	How do you think your volume, tone, mood, or attitude affect your students?

Brenda	I think my mood would affect them a lot. If there are some days, obviously, we all have those bad days, and they know. They need to be on task and they know what they are supposed to do. I try not to let it affect my teaching, I try to always be excited about what we are doing, but if I am not excited about it, they are not excited about it.
Christopher	What if you come to work with a headache, do you tell the students?
Brenda	I do, I let them know I am not feeling my best and most of the time they are pretty cooperative with it.
Christopher	Tell me what assessment looks like in your classroom.
Brenda	There is the typical multiple choice assessment that could be given with paper and pencil; sometimes there will be an open response, or a written response. Sometimes I will have kids create a poster depending on the concepts we are talking about. Projects, PowerPoints (*sic*).
Christopher	You mentioned post-it notes earlier, do you consider this a type of assessment?
Brenda	It would be a quick assessment, but probably not something that is graded. Yeah, I guess it is assessment. It would be to gather how the students are doing. These are important because they are going to guide my instruction and let me know if I need to reteach or if they've got it I can move on.
Christopher	Regarding the role of the teacher, what is the difference between test prep and teaching?
Brenda	Teaching and test prep, I would say that test prep would be more reviewing concepts that we've been doing. So there is a lot of repetitive stuff. In my classroom, even with test prep, the kids create most of the manipulations and motions to help them remember vocabulary. In fourth grade, the tests are very vocabulary heavy. I feel that if the kids don't understand the questions are saying, there is no way they are going to be able to answer the question. Teaching is more of a longer process

	developed lesson. So it is newer concepts that would span over a week. Whereas test prep is reviewing one thing and we've got to keep moving on. Unfortunately it is kind of like cramming a lot of stuff back into their brains.
Christopher	Elaborate on what you mean by motions to learn vocabulary.
Brenda	In my classroom there are a lot of vocabulary they have to know. For example, for an acute angle, they will do a tiny little acute angle with their hands. We play Simon Says with it to help them remember different types of lines, such as line segments and parallel lines we create motions for. We will do it for any type of math vocabulary pretty much. It helps and during testing I will see them do the motions.
Christopher	What do you think are the challenges or barriers of differentiated instruction?
Brenda	I would say the challenges are when I don't have enough resources; differentiation is simply not practical on a day-to-day basis. If I have students who are below grade level, coming up with resources or coming up with ways to help them is a challenge. And then there are kids who are way up there reading at high school level. So to find books and novels for them that are not so mature, but on their reading level to challenge them, is difficult.
Christopher	So what do you do, how do you go about finding things?
Brenda	I will search as much as I can, sometimes I may have to go a little bit below their level. I might find a book that is a little below their level, but it is a bit more mature of what a fourth grade reader would read, but it is not high school. And so that will challenge them because they have to think about what is going on in the story. The teachers at my school, we work together a lot, so I get help from them too.
Christopher	Any other barriers or challenges (*sic*)?
Brenda	To me it doesn't seem difficult, just finding resources that help and meet the needs of the kids is a challenge.

Christopher	Anything else you would like to add to the conversation about differentiated instruction?
Brenda	Not that I can think of.
Christopher	Thank you for your time.
Brenda	Thanks so much.

Jennifer

Christopher	Thank you for volunteering to participate today, I appreciate your help in finding out what teachers know about differentiation. Please tell me your name, highest academic degree, what you teach and your roll at this school, how long you've taught at any location regardless of public school or private school and please include the 2014 school year, and how long you've taught only at this location.
Jennifer	My name is *Jennifer*. I have a master's in creative arts. I am a fifth grade teacher at this school at this point; part of this year I was a four five combo teacher. I've been teaching since 1982 in [redacted] and here since 1999. I've been here since [redacted] opened 12 years ago. I was one of the leadership teachers who opened this school.
Christopher	How often do you attend professional events, such as staff development and teacher in-services, inside and outside this building?
Jennifer	Well, obviously the four staff developments, or whatever, that we do a year I participate in. This year I haven't gone out and taught any of them on those days. I am also a head leader for the Department of Education on writing proficiency. So previously in other years I go out and spend a lot of time. And, then, at this point it really has to be a class that strikes my interest or we get paid for it at this point because I am done sitting in useless classes. So I've been to a couple this year.
Christopher	Do any of these events, in-services, or developments discuss strategies that discuss differentiation?
Jennifer	Yes, I actually just a really cool one out at the [redacted]. Neither one of the leaders was a teacher – one was a scientist. But her big push was how to give us teacher strategies to use in other areas besides the [redacted] and how to reach other kids.
Christopher	How did you find out about this opportunity?
Jennifer	It just popped up on [redacted] and I said to a friend, hey, let's take this class. It popped up with [redacted] but we were paid through grant money. We went for eight hours on a Saturday. One of the best

	classes I have ever taken. The other lady worked at the [redacted] museum here. They would lecture, and then we would have a fun, hands-on activity. And then a lecture and a hike; the pace was fast and so good. It was well worth the $30 per hour.
Christopher	How did you learn about differentiated instruction?
Jennifer	I don't think you can teach it to someone before they become a teacher and I don't think someone can learn it at the beginning. I think you have to experience some of the stuff that goes on in your room and try to find some of your own ways, and then, maybe get ideas from other people.
Christopher	How do you define differentiated instruction?
Jennifer	Find a way to reach each kid where they are at in an idealistic world. Even, going back, when I first started teaching, it was all textbook, textbook, and textbook. Even back then I didn't just teach the textbook. Being very ADHD myself, I was one of those kids who hated just reading out of a textbook so I promised I would never do that myself.
Christopher	What are some of the common strategies you use to differentiate a lesson?
Jennifer	It is harder with Common Core (Standards) right now because it used to be I could totally teach wherever the kids are at and, I would do it, and they could get a grade. Now the really low kids have to be doing the grade level stuff and they get F's because they cannot work at that level. So in math, for example, if I am supposed to be teaching long division, I can only teach division facts to the kids for the whole math time because they are supposed to be doing grade level work. So that kind of changed how I look at it because I cannot ignore how they are not doing grade level skills. In math for example, whatever whole lesson I am giving, I might pull some students back and work with them on a specific concept. I certainly doing say, well you struggle, so you do two problems while the rest of the class does 100. That's useless to me.

	Even in [redacted] when I was teaching I used so many different manipulatives and so many multiple strategies to try to get them to that skill so they could conceptually see what it is. So if I see that a chunk of them are struggling, then that means I did not teach it right so I need to find another way to teach the lesson, a different way to look at it and how to get them to grasp their hands around it. I do a lot of think-pair-share so if they are not getting it from me, they can get it from another student. Writing is writing; it doesn't matter to me if I am teaching fifth grade writing or third grade writing, I am teaching the same skills basically so they are working at their level.
Jennifer	I did spend a couple of years on teaching writing at the district as a pull out. Reading, at fifth grade, we do RtI at the grade level. So my reading group all year is the same, on grade level in my reading group time for an hour and half in the afternoon. So it is pushing those high readers to a different level and higher thinking skills because they can word call. Someone else deals with the students who needs (*sic*) phonics. I've never had to teach phonics – to go back and teach phonics I would struggle with. In the past when I had some resource kids in the room and they did some of their time with me, they would get a lesson not quite at the level that everyone else was doing.
Christopher	Can you think of a specific lesson that considers differentiation?
Jennifer	Uhmm, (pause), writing which involves working on all of the complex sentences and compound words. I will do sentences with sentence strips so they get words, and as a table, they have to rearrange the sentence. Doing that sometimes heterogeneously, and sometimes with easier sentences to go through for other students who don't need ten adjectives to examine. They are able to put a capital letter at the beginning and make sure it has a period at the end. The rest are doing things that are more complex.
Christopher	How often do students use computers during the week for instructional purposes?
Jennifer	In my afternoon reading time, the lower levels are on there every day as part of their reading block doing things at their level. In the

reading groups that I do, there wasn't enough time to fit everyone on a computer, so I don't do the same rotations every day. So four days out of five they are on the computer doing research or doing writing, or doing a PowerPoint – something that has to do with their lesson.

Christopher What role does technology play in your ability to differentiate instruction?

Jennifer I use a laptop and Smart Board all the time; I don't know how I taught without them, especially with an Elmo. When I think about the ditto masters we used back in the day, how nice it is to be able to mark and use the Smart Board and pull down the calculator part of it. Kids are able to go up and highlight.

Christopher What is scaffolding?

Jennifer Building on the skills that are already there and taking them to the next level and going through that cycle (*sic*).

(Intercom announcement – loud overhead speaker)

Christopher How do you use it in the classroom?

Jennifer Obviously in math, a lot, because so many other skills build on each other (*sic*). For example, in geometry, the last unit we did, I used multiple intelligences for the students and that is how I differentiated the lesson. The lower kids could tell if it was a right angle and make it into different shapes.

Christopher How does your volume, tone, attitude, and mood affect your students?

Jennifer It is huge (laughter); luckily, I am one of those folks who come into work every day in a good mood. I like my job, I could retire, I'm old enough. For example, the teacher next door, she has been checked out since October. She comes into the classroom every day in a bad mood and the kids know it when they see that look on her face every day. She is totally burned out. I am not one who likes to raise my voice, so when I do the kids know I am serious. I have to watch the way I treat this one boy because he knows how

	to push my buttons. Because of being ADHD growing up, I have a huge amount of patience; it doesn't mean I can't be pushed, but it takes a lot to get me there. If I get annoyed with him, I cannot take it out on the rest of them. If the kids walk in and know they are respected it is a better place, I am not having (*sic*) to deal with all of that stuff.
Christopher	What if you came to work with a headache that morning, or not feeling well. Do you tell the students?
Jennifer	I came to work a couple of mornings with a cold, which is odd for me, I tell them. They know I am hurting and they respect that I tell them. They care enough that when they see I am not at my best, I don't even have to tell them.
Christopher	What does assessment look like in your classroom?
Jennifer	All sorts of different ways; I am different from the grade level since I don't teach the Basel and I don't say take this test, this test, this test. I am the only one in the grade level who doesn't do a spelling test. I haven't done a spelling test in years. But my kids do as well as everyone else who does take a spelling test. A quiz does pop up so I can see who gets it. Sometimes the grade is for me, or for them, sometimes it is for their moms.
Christopher	So what does assessment look like if you are not doing a lot of tests?
Jennifer	They do some paper and pencil tasks, but it is not like, it's Friday, so we are testing. Quizzes in math I make up of what we did throughout the week so I can tell if they are paying attention and grasp those. Sometimes we take a quiz and they keep it to grade so they can see what they didn't know and how to do it. I didn't want it for a grade. I sometimes tell them to hold on to them and I do not put them in a gradebook.
Christopher	Does assessment every look like one on one time with you, or perhaps a skit or project?
Jennifer	Absolutely, The projects there are on the wall is a good example of that. They are from the last novel we just read.

Christopher Regarding the role of the teacher, what is the difference between teaching and test prep?

Jennifer Test prep is just cover your ass stuff to make sure you don't have the lowest test scores in the building, knowing that the kids aren't going to hold it. Knowing that you are not teaching which is why I got rid of spelling tests years ago. My philosophy on that is that these 10 kids are going to spell any word I give them, it doesn't matter. They are never going to have to study because they are going to get one hundred percent on the test. And these 10 kids are going to study and know it on Friday morning when they take the spelling test but on Tuesday when they write, they can't spell it like they've never seen it before. Then you have the other ones who may pick up some of the words and strategies. So that to me was test prep, not learning how to spell.

I have a lot of experience with the Department of Education writing their CRTs in math, science, an reading, and going through and looking at the validity of a test question and how it going through. From day one I teach my students how to examine a test question, not three weeks ago because we knew a test was coming. That is teaching not test prep. They take ownership of it and can take it with them to middle school; yes, it is test prep, but it is also teaching. It is that sort of philosophy.

Christopher What barriers and challenges do you think exist to differentiate instruction?

Jennifer If it were so easy that we could teach everybody the same thing and they could all learn the same thing we would put them in front of a computer and we wouldn't have a job. The same barriers with anything you teach, it doesn't matter the subject it is, the kids are all so different, more so than when I was a kid; there were odd balls like me that didn't fit in. And now, I am not even sure what normal is. With what they are going home to in their home life, with the chemical imbalances in their body, whatever, so, you have to take that into perspective with what the kid is going through. Luckily at this school we don't have children that are too hungry to learn, so that is an issue in some schools. The barriers is just

	finding enough time to prepare what you need to do, and this time in fifth grade, I need to work with this five but I have another five that also need me. You are pulled in what you need to do.
Christopher	Anything else you would like to add to the conversation about differentiated instruction?
Jennifer	I am lucky that my kids that get done early in this group don't bother me; that's one of the barriers to keep the kids busy, what do I do, what do I do? So my best students can pull out another assignment to work on. It is not a race to get done so I can play. I am lucky now, good luck to me on that next year.
Christopher	Yes, good luck and thank you for your time and contributions to this conversation about differentiation.
Jennifer	Sure (*sic*).

Judy

Christopher	Hello, Please take a moment to introduce yourself to me. Be sure to tell me your name, your highest academic degree, what you teach, your roll at this school, how long you have taught at any location including public and private schools and the year 2014, and specifically how long you have taught at this school.
Judy	My name is *Judy* and I teach first grade. I have a master's in education specifically in early childhood.
Christopher	When did you get your master's degree?
Judy	2008. I've been at this location – I think this is my eighth year. And before that I was a stay-at-home mom of four kids so I hadn't taught in 18 years. I did teach first grade at [redacted].
Christopher	How long did you teach there?
Judy	I taught there 2 years and then in [redacted] I taught in a politically incorrect labeled handicap pre-school. I do not know what they call it now, but that's what the terms were – moderate to mild. So I think that's it.
Christopher	So totally you've taught 10 years?
Judy	Probably, maybe a little bit more - probably 11.
Christopher	How often do you attend professional events inside and outside the school building?
Judy	Probably once a month; my goal this year was to go to at least one meeting every month.
Christopher	Do any of these events involve strategies that discuss differentiation?
Judy	This year I have not been to any developments that discuss differentiation.
Christopher	How did you learn about differentiated instruction?

Judy	I like to see it modeled and be able to do it so when I go back to my classroom I know exactly what I am doing. It was really nice to observe. Some naturally have it and watch to teach to other types; these are gifted. Mentorship and modeling; very simple strategies are the best for us to learn. The simpler things are most effective. Mentors have to be out there and sharing what they know.
Christopher	How do you define differentiated instruction?
Judy	It's what you need to do to teach students at their individual level – what they are capable of. They use the word ability to discuss a student's progress in DRA scores. It is teaching effectively and efficiently towards all students towards all intelligence types.
Christopher	When you say the word, "they," who are they (*sic*)?
Judy	In classes I've taken recently leaders say all students have the ability to learn; I can't remember the specific word they use or the jargon, but it's teaching at their own level of performance.
Christopher	What are some of the common strategies you use to differentiate a lesson?
Judy	Common strategies – Your recording will not be able to tell what this classroom looks like, but, I do have a high volume of special ed (education) students and use a lot of cooperative learning. I think everyone has something to offer and that is key. Students are encouraged to work together in most things. Students work in teams with mixed ability groups. Flexibility grouping is big! Charts help us learn too as well as graphic organizers.
Christopher	Tell me about a lesson that considers differentiation?
Judy	When I think of a lesson, the lesson must be appealing; it has a hook in the beginning. I can give you an example with math. When we measure, I allow the students to walk around the room and measure different things. Students work in pairs and according to their ability.

Christopher	Do you give interest surveys to students and are students ever engaged in activities by their interests or learning profiles? And by that I mean do students have opportunities to explore a topic of their interest?
Judy	That's a good question. I give one interest survey to the student so I can see how the student sees himself or herself. I also give one to the parents. No a lot, but there are some. For individual centers while I'm working with a small group there is a writing area. I will give them a selection of things to choose from that, so it is not completely random, but a controlled random. Very rarely do I give them a free write because that just leads to - -it's just not good. Even things like the computers I make certain things available so they choose from what I provide whether it's site words or a spelling activity so it is not their specific interests.
Christopher	Are any of the things you choose from according to the interests of the students?
Judy	I have not given them an interest survey or anything like that. I specially have to say no. I think I have my finger on what students like and try to gear it towards that at this age level.
Christopher	You made a comment that if you did not give the students a writing prompt it was not good or it would not turn out good – what did you mean (*sic*)? What would happen (*sic*)?
Judy	Very specific – I will find an actual prompt that tell them what they have to do such as an opinion letter. One might say write a letter, another might say what is your opinion so I give them a form so they have to have an opening sentence and a closing sentence. If I were to just say write about anything, kids would go and say, "I love my mom. I love my dad." There is no structure to their writing. This prompt I have says, "Do you think you have too much homework? What is the right amount of homework? Write an opinion piece about this issue." (*sic*) Then we use something called a tree map that is a thinking map.
Christopher	Like a concept map?

Judy	Yes it is. It is a combination of a flow map and a tree map, Oh my goodness, thank you. It helps us guide their writing.
Christopher	How often do students use computers during the week for instructional purposes?
Judy	For instructional purposes – like me using it with them or students actually on the computer?
Christopher	Students are actually on the computer.
Judy	They are on it two to three times a week because they visit the ones on the computer every other day . . .
Christopher	The ones in the computer lab?
Judy	The computers here in the classroom. Every day half of the class gets on the computer for 15 minutes. And that's new because we were able to request those when we got new funding.
Christopher	What role does technology play in your ability to teach a lesson?
Judy	The students, especially, when I am starting something new, a lot of them do not have the same background knowledge. So I like to front load a lesson to build a foundation to build on. It gives them some concrete information for my ELL and special ed (education) students to draw on. I use technology quite a bit even for an interactive White Board for these kids. I use technology daily.
Christopher	What is scaffolding?
Judy	Scaffolding is building off of what you already know. In some cases, it is what you should know. In some cases, it is going backwards and taking the information to connect it to the information already there. Not just information, but the thought processes also. I have to go back to the curriculum, their thinking, and take their thought process to another level at this early age. Scaffolding is not in my lessons, but also in my planning.
Christopher	How does your volume, tone, attitude, and mood affect your students?

Judy	That's a scary question, isn't it? With this group, my tone and volume has changed quite about. When I teach, I teach at this volume I am speaking with you right now. If I get a bot louder, I notice the kids get louder too. So I tone down and they get back on track. We know each other now, so they know when I am excited. If I am not excited, they are not going to be excited about what I am teaching. If I Iook disinterested when I am teaching, the kid will be disinterested as well.
Christopher	What if you have a headache or not feeling well, do you ever communicate that with your students?
Judy	Absolutely, I absolutely tell them. I am not going to run in and pretend if I am not having a fabulous day. I tell them and we talk about it and they tell me if they are having a bad day too. I am very real with my students, but we still have to get business handled. I think that is very honest.
Christopher	Tell me what assessment looks like in your classroom.
Judy	Assessment looks like a lot of things, depending on what you are assessing for. I think most of my assessment comes through discussion and performance task with a rubric. It keeps consistency with the curriculum. Assessment looks like doing a quiz on the computer or reading aloud to me. Whether it is our class conversations or I am working with them in a center, it is assessment. It is also project based even for this age. Teaching is assessing, especially in our culture now a days. There is a mixture, formative and summative.
Christopher	Regarding the role of the teacher, what is the difference between teaching and test prep?
Judy	There is a big difference between teaching and test prep. Test prep to me is here are the things you are going to be tested on, please learn them. Of course in this primary grade, testing isn't as important yet, but we still feel the effects from third grade teachers to make sure we prepare the students in the primary grades. Testing is a necessary evil, but I want my students to be able to achieve the benchmark and standard, to master it. Test prep is short

term; when you talk about scaffolding, always being able to visit the old stuff to build on the newer, this should also prepare for test prep and teaching. Teaching is something further.

(Intercom announcement – overhead speaker)

Christopher What do you think are the barriers and challenges of differentiated instruction?

Judy Time, it is always time, isn't it. Time and money are barriers for a lot of things. And resources (*sic*). When you talk about those tangible lessons, it is hard to do it by yourself when they have so much to learn in such a short period of time. I have a lot of tried and true tricks up my sleeve, but sometimes they don't work on a kid and you have to take the time to find one way to reach that kid. And to find the resources can be a challenge; we have a great administration and they support anything we would do for our students. The professional development is also an issue; we can talk differentiated instruction, but I don't think a lot of teachers out there even understand what it looks like and how to do it unless they see it. Professional development is key to the understanding and doing it every day.

Christopher Anything else you would like to add to the conversation of differentiated instruction.

Judy (laughter) I've probably talked your ear off; I don't have anything at this time (laughter).

Christopher Thank you

Judy Yes, thank you for doing this.

Appendix K: Focus Group Transcript

Names of participants: Amy

Sandra

Donna

Susan

Joyce

Christopher	Hello and thank you for spending some time with me during this focus group; what I would first like each individual to do is introduce themselves, telling us your name, your highest academic degree, role at this school, how long you've taught at any school, regardless of public or private location – and include this 2014 school year, and finally how long you have taught only at the school:
Amy	OK, my name is *Amy*. I have a master's in literacy, I teach third grade. I've been at [redacted] for 8 years and [redacted] for 8 years so I've taught a total of 16 years.
Christopher	Thank you - - Sandra.
Sandra	Hello, my name is *Sandra*. I have a master's degree, I teach fifth grade, I've taught at [redacted] the whole time, and I think I am at 12.5 years . . .so my entire career is here.
Christopher	Did you start teaching mid-year?
Sandra	Yes, I came here the first year the school was open, but not until January.
Christopher	Thank you for sharing
Donna	Hello, my name is *Donna*. I have a master's degree in Elementary education. I teach first grade and I've been teaching – this is the end of my sixth year all her at [redacted].
Christopher	Excellent

Susan	My name is *Susan* and I have a bachelor's degree, plus 32. I might as well get my master's (laughter and audible, multiple comments). I teach second grade, and I've taught for 10 years and been at [redacted] the whole time.
Christopher	Thank you
Joyce	Hello, I am *Joyce* and I have a bachelor's degree, I am getting my master's in September. I teach fourth grade; I've taught 2 years and both are at [redacted].
Christopher	What are you doing your master's in (*sic*)?
Joyce	School administration
Christopher	Great, thank you. I also want to let you know that as we continue, I am not going to call on you to speak; I'd like for as many of you who want to, to respond. Feel free to add to what your colleague is saying or if you want to challenge or contradict an opinion, that's OK (*sic*) too. This stays in the room. I hope you are comfortable with that. Also, before you speak, please state your name. I realize it will seem odd, but it will greatly help me with transcribing this focus group discussion since I do not know you and am not familiar with your individual voice. Also when I assign you to a pseudonym, I can be consistent in the process.
Christopher	OK, this is Christopher and I am speaking. Let's get started. The first question I will ask is how often do you attend professional events, such as staff development or conferences regardless if it is in this building, within the district, or on your own? How often throughout the school year?
Sandra	I would say not as much as we used to just because there are so many restrictions. We used to be able to do it during the school day and you could get a sub so you could participate in a lot different, you know extra studies. I would say before I would go to a ton, but now the more I've been teaching the less I attend.
Christopher	When did they change that?

Sandra	Years ago (*sic*). I definitely went to so many more and it's hard after school. In the summer I usually go to 2 different types of trainings. Or I try to go to a math and then a couple days other things. Probably during the school year only a couple (*sic*).
Donna	I agree with what Tracey is saying. I do try to attend any book studies or professional development that they have here at the school because it makes it easy to attend.
Christopher	Are those conducted by [redacted] employees or other district leaders? Are staff members from other schools also invited?

(Multiple members of the group speaking at once)

	Not usually . . .sometimes other teachers come, but mostly it is just us.
Amy	Our last staff development, we actually had first grade teachers from [redacted] come to work with the first grade teachers here at [redacted] because we are going to be implementing a new reading program next year.
Christopher	Did you enjoy that collaboration with your colleagues?
Amy	It was a waste of time.
Christopher	How come?
Amy	I will be going to first grade next year, so, I teach third grade right now. We really didn't dive into the curriculum; we just sat there and mapped out what we will do for the whole year, which, in my opinion, is a waste of time because things always change. So the teachers at [redacted] got off task and started talking about their own thing so it was a waste of time. I actually wanted to get into the curriculum and see what a typical first grade lesson looks like.
Christopher	Why set this exchange up – who arranged it?
Susan	I think it was [redacted], she is our learning coach at [redacted].
Christopher	Any other comments about staff development?

Random voices	I agree, that covers it.
Christopher	Do any of these events that you attend specifically discuss differentiated instruction or address differentiation in the classroom? Do they call it out by name?
Sandra	Years ago we did like different book studies and we discussed sensible strategies – we actually got the book and read different chapters. It did focus on strategies for learners who struggle, different types of learners.
Christopher	These are book studies – books for adults that you read as a group?
Sandra	Yes, we read them and discussed. We even made a kit of make-and-take items. I keep looking at your because we both have taught here so long
Susan	You're right . . . that's it, yes make-and-take lessons, items. I agree, we would do before school a lot and that was easy on us. Rarely was it after school. We even got paid for it sometimes. I agree with Tracey, a lot of it was when we first started teaching, and now you don't really get the training as often – it's not offered as much.
Christopher	So Joyce, for someone who has been in the district for 2 years or only teaching two years, when you hear this, what's going through your mind?
Joyce	That I missed out. None of this stuff has been offered or talked about with me, so it would be nice. Luckily, here, I have a couple of good mentor teachers who help me with all of that. But if I did not have those people, it would be a really tough transition from subbing to full time. I tried to look for trainings, but I usually fit them in over the summer. There really are not any that focus solely on differentiated instruction.
Sandra	I think if they offered more, more teachers would go - I really want it. People would go.
Amy	Inclusion was the hot word at our school for quite a while. That's when we got the differentiation instruction, and we went to an

	awards banquet where we won 2 years in a row for our inclusionary practices with our students. It just seems like now it's just not discussed. It is expected, but we do a lot among grade levels where certain people will take the kids into groups, and others do the same during that time and focus on differentiating that way. It was a hot word for a while at our school.
Christopher	But nothing really right now (*sic*)?
Amy	It's expected, I think we just do it. We just naturally do it.
Susan	It comes up a lot with the RtI stuff. We have the kids who are struggling and all of the tier talk and stuff, and we do not really hear that anymore, you know. It just kind of.
Christopher	Is there a specific team in this building that does response to intervention?
Susan	It starts with grade levels and we meet on kids – the ones we meet on several times and we do not see progress, they get taken to the school RtI team. That has the counselor, a learning strategist and all of that kind of stuff on it. Very typical (*sic*).
Christopher	Thank you. How did you learn about differentiated instruction?
Joyce	I went, pretty much every college class that I took, every single class I took there was a whole category about differentiated instruction within math, within language arts, social studies, within anything. I learned the best through just diving in and having to learn. We switched for reading groups, we switched for math. Um, All of the stuff I learned by just getting into it.
Christopher	So what you are saying is you learned through hands-on experiences and that was the best for you to learn about differentiation?
Joyce	Yes, seeing firsthand the kids – you hear about grouping kids, but when you actually have to do it become real. You look at the data and all of that stuff and watch the kids learn, yes that is the best practice, hands-on.
Christopher	Someone else?

Donna	I am just agreeing with what Joyce had to say. For myself, hands on is the best way for me to learn.
Susan	I think a lot too if we discuss within the grade levels and just kind of see someone do it – I mean we are very blessed that we have so many manipulatives and all kinds of different books we can use; with other things that don't work, we have so many resources here that do work and helps a lot by talking with other and going in and seeing someone model. Another thing too is the time. When are you going to get this all done, so you have to figure out what time are you going to do this with your team? It's hard to differentiate.
Joyce	One good thing – the week before I actually started teaching, they brought me here and I went to all of the teachers in my grade level and I sat in each classroom for the entire day. It was really nice. For one, I got to see what I was getting into and I also got to see how they differentiated a lesson and everything. You know. Not just hands on, but watching other people do it.
Christopher	Did you student teach the grade level you are currently teaching?
Joyce	I taught K and fourth grade so I got practice with both. In [redacted] we did a semester of each.
Amy	I think a big thing with this staff is a lot of the staff opened this school or have been here a long period of time so we know this stuff. We will even do differentiated instruction across grade levels. Like [redacted] ended up having a student in her class and he was really low so he started coming to our reading group because he was so low. Really differentiating for him was not feasible, so he started go to our lowest reading group in third grade. So we did that for a while to see if he made growth.
Christopher	So it was a fourth grade student going to a third grade classroom? Did he feel bad, did he even notice he was reading at a grade-level lower than his own?
Amy	He was excited because he had us as teachers last year and we welcomed him. He was excited and he felt successful. He was successful; it was growth, but minimal.

Susan	On the opposite, sometimes we have a first grade student come up to second grade. That way they are a high reader and they get differentiation that way. I had a student come in and he was doing really well. He was higher than some of my kids! It's great that we are all just, yeah, just come on in. It is for all different subject too.
Christopher	We've talked a lot about differentiation, but how would you personally define differentiated instruction? I will give you a moment to think.
Sandra	I would say teaching kids at their own different levels. Giving kids the instruction that they need at their level.
Joyce	Making learning acceptable to all types of learners and students, so whether it is a lot of hands on, visual, audio, anything they need for instruction to be geared towards. So that everyone has - (*sic*)
Amy	Taking the same curriculum that is expected for all students to learn and being able to teach it in a way they are able to understand.
Donna	I agree with all of those and my answer is closest to Sandra's answer.
Susan	I also agree with everything; we all learn differently. Also I want to add we need more time. Some kids do better in a small group, others in a large group. We just need to figure out what works for that kid individually.
Christopher	What are some common strategies to differentiate a lesson? The next question will be about a specific lesson, but right now focus on general strategies such as grouping, when most of you have discussed. What other strategies?
Sandra	We use a lot of data here; we are data driven; I know looking at data and seeing grouping based on data and reassessing that data. Not just everybody taking data from the whole school, but just within our own classroom we do data recording, interpretation, and base grouping off the data.
Christopher	Do you regroup throughout the year?

Sandra	Yes, we do it in our classroom and, for us, we do it as a grade level. We do it for reading groups a multiple times a year.
Christopher	Define multiple (*sic*)
Sandra	Three to four for major reading groups (*sic*). We meet as a 5th grade team to talk and discuss. It also helps because you get that discourse and realize your student is going to someone else's class and you may have not realized something about them, so it is good to talk about it as a grade level.
Christopher	Anything else (*sic*)?
(silence)	
Christopher	Joyce, a few minutes ago you mentioned some strategies such as visual and auditory.
Joyce	Yes, not long ago we did a unit on the plants; I not only showed them and gave them lap books, but I showed them videos of all of the planets and we played interactive games on the Smart Board. Not just talking about it, but showing them what does the Earth's rotation look like?
Amy	I am thinking some of us team up with another person which makes differentiation a lot easier. An example is with my teaming partner, she takes the lower kids and we have a rotation in the morning where we each meet with four groups. She does a lot more of the visual representation. She has the four lowest groups and I have the four highest groups. She uses different programs with them. I have the highest so I do literature circles with them. There is a really high group in third grade who are reading at the 7th grade level. Teaming is a great strategy.
Joyce	There are little things too like different homework or different projects adapting and modifying homework, different assignments. My class this year was all over the place because I had really low and really high. The really high got some extra research based projects. They went to the pods, computers, and did research. Homework, I had three students doing homework at a first grade

	level; he couldn't read the passages. One got bumped up to second grade. He had success. That's one example.
Amy	We did differentiate with our spelling words. We used Words Their Way. I based my homework off what DR (derivational relationship) group they were in for the phonics part.
Susan	Primary grades are all about manipulatives, so if you have a number you can get out the blocks and they can build with tens and ones or if you are in a reading group, you have actual magnet letters and they are building the word, so the hands on stuff are actually better. I feel like kids get math so well because there are so many manipulatives where reading and writing are harder, but you do what you can with it.
Sandra	To add on to that, teaching multiple different strategies, like I know math now is taught with so many different ways to multiply or so many different ways to subtract, if we teach all of those different strategies, the kids that like a particular method use it because their brain works that way and I let them use it. I don't care what strategy they use as long as they understand it and able to.
Christopher	Kelly gave us one example with the plants with a specific lesson that she differentiates, can you think of another topic, thematic lesson that is differentiated.
Sandra	I would say all of our reading lessons are differentiated. I mean we all do different reading groups and have multiple different lessons. That is a year-long thing, but not one specific thing. It is a lot easier to do grouping in reading and stuff like that, but math, besides using manipulatives, it is hard to get that grouping in math.
Christopher	OK, we have science, math, and reading; anything in social studies or another lesson throughout the entire school.
Amy	In math I am lucky because I have a special aide that pushes them so I find that differentiation is a lot easier. Even when I didn't have her I would teach the math lesson to the whole group and then do a lot of pairing up with kids and once the kids would get going I

	would put together a group that really struggled and work with them. So in the third grade it is big on being able to add and subtract multi digit numbers with regrouping and borrowing. Which is very hard for kids who do not have a number concept, they don't understand what that looks like.
Christopher	How often do students use technology for instructional purposes throughout the week? Can you think of a whole number?
Donna	Do you mean students use technology independently or we use it to teach?
Christopher	Both, very open ended question.
Donna	I have computers as one of my centers time and they use that for learning math and reading once a day, every day, for 15 minutes.
Amy	We do the same thing, it is actually a center rotation in the mornings when we do learning groups. I would also say at last once a week, where I now finally know how to use a Smart Board, and once I figured it out, just going in and getting lessons off the Smart Board that other teachers have created. I can just type it in – rounding, or skip-counting, geometry – whatever concept we are focusing on and it comes up with interactive games and activities, so I actually used it a lot this year than in past years because it is already there for you and the kids love it and they stay a lot more focused.
Susan	I do not have my students on the computer every day; usually once a week, but within the classroom I do pretty much do the SmartBoard every day, all day long, whether it is scholastic news and they have their own copy and we are doing little games. Math may have a fun game they can do; these days the kids need anything that can keep their attention. But with their whole group lesson, our grade level came up with lessons that go along with Engage New York, that's about 40 minutes, with visuals and questioning – they love it and I really like it too. I am more doing it on my own and them not on the computer.

Christopher	Earlier you mentioned the enormous amount of manipulatives and support items you have for teaching at this school, do you feel like you receive enough training on those? You mentioned there was a time you did not know how to use your Smart Board very well; is there enough technology training or do you think there are too many choices and too much that it should be focused?
Donna	The training we have great techs here so if you need to stay after school for help, it's always here. They are like email or call me and I will come in and help you. I think any kinds of questions – and we have lots of staff that are trained too so any types of questions can usually be answered.
Christopher	Was that a district training that the staff received?
Donna	I've been to a district training, that was last year; they offer them district wide, but here at this location we have trainings and stuff too.
Joyce	(During) part of my new hire and orientation, I had to do a certain number of hours and one of the choices was Smart Board training. So for new hires they are really big on technology. I think they did a good job of training us.
Sandra	At our school we have a lot of technology; we have iPods, iPod Touches, iPads, computer labs, Smart Boards – we have so many hands-on things and computers. My kids go on the computers 20 minutes, maybe 2 or 3 days a week. Like Laura said, there is a lot to use in the classroom with video clips, games, or interactive activities on the board.
Christopher	Does that role of technology help you differentiate better?
Sandra	I think so just because you are getting to the different learning styles; you get the visual learner, the auditoria learner it is a lot. They can go up and touch things so you get the tactile learner. I also make them write notes so they are writing it. I am hitting a lot of different learning styles.
Christopher	How would each of you define scaffolding and how do you use it in the classroom?

Donna	Scaffolding is a buzz word. Scaffolding is building on what you've already learned. I would just review what we did the previous day and build upon it from there.
Amy	I consider it the structure of a building. You need to have that structure and framework there in order to build that building so it doesn't fall. Going along with what Lisa said, you know it is about activating that prior knowledge and if a kid does not have prior knowledge, I need to give them prior knowledge. A lot of our kids their prior knowledge is so different that if we do not provide a basis and prior knowledge, they are not going to get what we need them to get from the lesson. We build a lot of background.
Christopher	The example you gave, which one is scaffolding – the building, the framework?
Amy	The framework
Sandra	We have to build a lot of background since our students come from limited experiences.
Susan	With the Engaging New York, that's what we do every day. What do you know, what did we learn? We have anchor charts all over our room, pictures we add to it, more vocabulary words. They have like puzzles they work on; it does a great job with scaffolding and it helps me become a better teacher.
Christopher	I also hear you listing two additional strategies: journals and
Christopher	Changing gears a bot, how do you think your attitude, or tone, mood or your volume affect your students?
Susan	It's everything! (laughter). When they are doing the Engage New York stuff, I hear talk around school that I do not want to do it. Granted I am in a different grade level, but I keep say, it is all about the excitement you put into it. When we did the human body, I started out saying I am so excited about the human body! This is so great! So if I am excited they get excited. When we did the Greek mythology unit, they went to the library on their own and was (*sic*) talking about it. Also if I am in a mood they are also in a mood . . . it is hard to always stay positive. The volume too – I

	have a little bell and if I ring it, they know to get quiet. It is just one of those things you have to use to regroup.
Christopher	Any other comments on how mood or attitude affect your students?
Donna	I was just going to go along with what [redacted] said about how you present the delivery of the lesson. For our Engage New York we were doing early civilizations. We started off with Mesopotamia, and then we went to Egypt. When we got to Egypt, I am really an Egyptian fanatic, so I was really animated and excited and the kids really bought into that. I saw so many books coming from the library about different mummies, pyramids and it was really exciting.
Christopher	If you come to work with a headache or not feeling your best, do you tell your students or do you just kind of hide it?
Susan	I do.
Donna	I do.
Christopher	Donna does, Susan does (*sic*).
Sandra	I do not. I feel like if they know it, they will take advantage of it.
Amy	Sometimes I do and sometimes I don't. I have a really rough class this year and it's been a long year. Some of my kids can tell. They will say, [redacted] you don't look like you are having a good day.
Joyce	If I have a headache or something little I will say I can't talk as loud today so you're going to have to listen closely. I have a really good class this year; they know the rewards and consequences and they try really hard for the rewards. The kids can pick on it. If it is something personal, they can pick up on when I do not acknowledge it.
Christopher	Tell me some examples of assessment? Is it always pencil and paper task? It can be informal or formal taking 5 seconds or 50 minutes.

Joyce	I like project based. For geometry, they had to design their own town. They had to use a checklist of what had to be includes, but they could also do more. It was an easy way to differentiate letting some do the minimal and other expand. Instead of what's a ray, what's a line, instead of that they had to design a whole town with these items based on that. I also usually have a math and language test once a week.
Susan	Our school is an assessment because we have a sight word program – it is up to 1000 words, so how many they get they may get a dogtag, their name announced over the speaker and math steps. It is reading for the kids. We also have the DRA, AIMS list, fluency, and imcompt . . formal (*sic*). As far as in the classroom, quick little reading groups work.
Sandra	I use the responders with the Smart Board and it is a quick way to assess and see who knows what. You can also do a verbal assessment and show me with thumbs up, thumbs down.
Christopher	Regarding the role of the teacher, what is the difference between teaching and test prep?
Sandra	I hate the whole teach to the test concept and I get upset when teachers teach to a specific test the way they think answers are on a test. Yes, obviously we have to prepare them to take tests and see test questions. But I think our role is to teach them what they need to learn so they can apply that information in multiple situations. Not just one test question. So it is the content
Amy	The thing about teaching third grade is that it is the first year kids get to take the CRT. So it is torture. Our score are analyzed according to each teacher. OK, this teacher, this is how many kids passed, this is how many didn't. So I feel like there is a lot of pressure. I understand there is a lot of pressure for the school so throughout the year I will teach different concepts and about a month before the test I will teach to the test, I do a lot of strategies and a lot of testing strategies. If you get 25 and that's not one of your choices, what are you going to do? You can redo the problem again, and if that doesn't work you can choose the answer that is closest to it.

Christopher	Do you consider that test prep or do you consider that teaching?
Amy	I think both because, unfortunately education is all about assessment and it's not going to get easier. So I feel that it is both because I am teaching my students how to take tests and it is something they can use down the road.
Susan	Teaching for me is all about the experience, the memories. I want to create memories for my students they will remember as an adult. Just like the visuals you bring in, yes, I say, this is going to be on the test, and like go away from it so I am not just saying here are the answers. When it comes to teaching, I think all of us are awesome teachers. All of the prep we are putting into it with our own experiences with visuals, books, games - -that's the teaching part. Test is just the test saying you need to know these things.
Christopher	What are the barriers and challenges of Differentiated instruction
Donna & Amy	Time, time, time!
Sandra	Time
Susan	Time
Amy	I think materials too, especially with the RtI process. You have to try so many different interventions before you can move them on to the next level, before you can say this child may have a learning disability. It is kind of ridiculous that we have to do an intervention that we think probably won't work, but we have to get those three interventions in. So I would say partly materials (*sic*).
Susan	I think partly along with the RtI thing, the teachers may be a challenge. We all have busy lives and must accommodate multiple things.
Christopher	Thank you again for participating today.

Appendix L: Open Coding and Axial Coding Notes

Interview Question	Open Coding	Axial Coding
How often do you attend professional events, inside and outside this school building?	• Not as much as we used to due to restrictions • It's hard after school • More limited this year • Five • The required 4-6 professional development days that are required • Before school activities • Once a month • Two • During the summer I attend week long programs	• Once a month • The required 4-6 professional development days • Preferably, before school day and during summer breaks
Do any of these events provide instructional strategies discussing differentiation? If so, Where?	• Years ago, the book studies discussed sensibly strategies • None focus on differentiation • It is expected that we just naturally do it • Always within the technology workshops, but not in depth • Lately just about new curriculum • NV Wetlands • Not as many development opportunities as in the past • Discussed within RtI	• Not a specific focus on differentiation • If mentioned, typically within a technology training, (i.e., Smart Board) • Fewer training opportunities available for teachers
How did you learn about differentiated instruction?	• Professional Development • Diving in and having to learn • Hands on experiences • Demonstrations and observations • Mentors and colleagues • School District In-services	• Professional development within the school district • Observing other teachers in a real classroom setting • Coaching and mentorship from colleagues

Interview Question	Open Coding	Axial Coding
How do you define differentiated instruction?	• Teach kids at their own different levels • Teach in a way that students understand • Teach students where they are • Teach according to individual abilities • The teacher figures out what works for each student • Learning assessable to all students • Tailoring teaching and curriculum to individual student needs • What students are capable of	• Teach kids at their own level • Teach at individual level of the student • Meet the needs of all students
What are some of the common strategies you use to differentiate a lesson?	• Scaffolding • Materials • Grouping • Visual materials • Auditory materials • Polls • Different assignments for different students • Think Pair Share	• Scaffolding • Technology • Grouping
Tell me about a lesson that considers differentiation	• Reading groups • Math and volume lesson • Figurative language lesson • Interest surveys • Science lessons • Writing lessons • Reading lessons • Social Studies lessons	• Reading lessons • Math lessons • Science lessons
How often do students use this computer during the week for instructional purposes?	• Once a day • Once a week • 2-3 times per week • 4-5 times per week	• Once a day • 4-5 times per week • 2-3 times per week

Interview Question	Open Coding	Axial Coding
What role does technology play in your ability to differentiate instruction?	• Engage New York • Compass Learning does the differentiation for you • SmartBoard allows whole group examples during instruction • Different perspective via the internet • Elmo is an aide during the instructional process • Allows the teacher to build on background knowledge	• Compass Learning • Engage New York • Smart Board
What is scaffolding and how do you use it in this classroom?	• The teachers builds instruction on what the students already know • Compared to the structure of a building – the foundation • Activating prior knowledge • The students provide a basis on what to build upon • Helping students along past what they already know	• Activating prior knowledge • Compared to the structure of a building – the foundation. • The teachers builds instruction on what the students already know
How do your volume, tone, attitude, and mood affect your students?	• If the teacher is excited about a lesson, then the students will get excited too • A lot • Students react differently to my volume • It's huge	• If the teacher is excited about a lesson, then the students will get excited too • A lot • Students react differently to my volume

Interview Question	Open Coding	Axial Coding
Tell me what assessment looks like in your classroom and provide oral examples.	• Project based assessments • Sight word program • DRA, AIMS list • Compass Learning • Traditional paper/pencil tasks • Checklists • Performance tasks • Discussions •	• Paper/pencil tasks • Project based assessments • Commercial program assessments, such as DRA
Regarding the role of the teacher, what is the difference between teaching and test prep?	• We teachers must teach test prep strategies • Test prep is teaching only the concepts on the test • Teaching is understanding concepts • If only doing test prep, then students are not learning • Teaching is about the experience, the memories, students remember as adults • Teaching is engaging students to develop authenticity • Test prep is short term, teaching engages long term memory • Testing is necessary evil • Test prep is repetitive, cramming	• Teaching test taking skills are important • Must teach concepts that translate to other situations • Teaching is engaging students to develop authenticity
What are the barriers of differentiated instruction?	• Time • Materials • RtI • Class sizes • Money • Diverse student populations	• Time • Materials • Diverse student populations

Appendix M: Narrative Report

This hermeneutic, phenomenology explored elementary (K-5) teachers' perceptions of differentiated instruction by collecting data from 12 teachers as participants during interviews at a southwest elementary school located in one of the 20 largest school districts in the United States. All participants were licensed, highly qualified (K-5) teachers who passed the Pre-Professional Skills Test (PPST), the Principles of Learning and Teaching (PLT) test, and the Specialty Area test (Department of Education, 2014). Data were collected and analyzed using open, axial, and selective coding.

Teacher participants collectively defined differentiated instruction similarly to authors and scholars of the referred literature who focused on each student's present learning needs and abilities. But the participants rarely discussed students' interests and learning profiles. In addition, some struggled to explain the multi-layers of differentiation as Hall (2002) discussed as a, "package of strategies" (p. 5); the participants knew various components of differentiation but were challenged to explain how their assessment and instructional strategies directly related to differentiated instruction – they knew it just did.

Equal opinions were given on how participants learned instructional strategies for differentiated instruction: four individuals referenced professional development and teacher in-service training events hosted by the school district, four individuals cited learning about differentiation from academic conversations with colleagues and mentors, and the remaining four participants noted learning about differentiation from repetitive

practice and hands-on experiences within their classroom settings. Teachers most commonly implemented differentiation in classrooms through the grouping of students; this was also a common theme within the referred literature. Time was the primary barrier to effectively implementing differentiated instruction.

The participants' passion for the profession was evident throughout all of my interviews; that same passion was also apparent for the topic of differentiated instruction. Hillier (2011) stated, "Differentiated instruction is not a rote procedure with sequential steps and a prescribed student end product; it is a process that recognizes each teacher is unique as the students and is shaped by the trails and errors of everyday classroom experiences" (p. 53). These participants understood the differentiating process in spite of challenges and obstacles from the profession and local school district.

Recommendations include staff development opportunities, such as book studies and teacher in-service days, which focus on collaboration activities of sharing differentiated strategies that work. In addition, I suggest the development of resource documents for multi-grade level use.

To the participants: I am humbled by your generosity of time and knowledge throughout this experience. Thank you for making this possible.