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## Private School Faculty Perceptions of Differentiated Instruction

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# Walden University

College of Education and Human Sciences

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Rebecca Glover

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> > Walden University 2023

Abstract

Private School Faculty Perceptions of Differentiated Instruction

by

Rebecca Glover

MS.Ed, Harding University, 2006

BS, Harding University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

May 2023

#### Abstract

Differentiated instruction focuses on students' readiness, interests, learning styles, and life circumstances, rather than a set curriculum. The perceptions faculty have about differentiated instruction can impact their willingness and ability to implement the practice in their classroom. The purpose of this qualitative case study was to explore, in a private school in a south-central U.S. state, middle school teachers' perceptions of, expectations about, and experiences with differentiated instruction. The conceptual framework that guided the study was Tomlinson' s instructional differentiation philosophy supported by empirical research on differentiated instruction as effective. Six middle school English, history, science, and math teachers completed a survey and were interviewed. Six themes were identified: (a) differentiation is needed in the classroom for all students; (b) attitudes change when differentiation is used; (c) there are limitations that make it difficult to differentiate; (d) differentiation demonstrates an understanding of skill; (e) the use of differentiation builds relationships amongst teachers and with their students; and (f) those that differentiate offer choices to their students. The six emergent themes revealed the challenges and pressures experienced by the teachers when differentiating instruction, such as time and expectations from parents and administration, and the value teachers had for the practice. Participants identified offering choices and having a variety of activities as best practices for differentiation. This study encourages social change by exhibiting how differentiated instruction affects educators' ability to design lessons with all learners in mind, in an effort to help students transfer their knowledge outside of the schoolroom and into their communities and future jobs.

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#### Dedication

I would like to dedicate my dissertation to my husband Grant Glover, my son Ryder Glover, my mom Donna Taylor, my dad Gerry Taylor, and all those who supported me along the way. I wanted my dissertation process to inspire those around me to always fight for what they want, even when the light at the end of the tunnel is hard to see. I thank God for the perseverance to keep going when things got hard, and for my husband's constant encouragement over the years.

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#### Chapter 1: Introduction to the Study

Most private schools have historically educated a relatively homogenous student population. Alternatively, some private schools have offered incentives to attract students that do not traditionally enroll in private school education (Ohikuare, 2021). To address this heterogeneity, several researchers have argued that the traditional style of teaching is not the only instructional method capable of addressing the diverse needs of students (Gibbs & Beamish, 2021; Ober, 2016). For example, Tomlinson's (2014) differentiated instruction is focused on students' readiness, interests, learning styles, and life circumstances, rather than a set curriculum.

A large amount of literature focuses on how to differentiate lesson plans and the success that differentiation brings to students who experience this type of instruction (Gibbs & Beamish, 2021; Godor, 2021; Haymon & Wilson, 2020; Lang, 2019) However, there is a gap in research on teachers' feelings about differentiated instruction, the expectations teachers hold about differentiation, and what their experience is when implementing differentiated instruction in the classroom, particularly in private schools. Parents may choose to enroll their children in private school for economic, cultural, religious, or student needs (Balossi & Hernandez, 2016). A careful review of the literature returned few results for research on private middle school teachers' perceptions about, expectations of, and experiences with, differentiated instruction. The private school within this study is a nationally ranked private school that is known for high academic standards and diversity of the student body. Although the students who are accepted into the school have a high intellectual ability, many have different learning

styles, and a large percentage of the student population also have learning differences. Due to the high IQs and various learning differences, teachers are given flexibility in their teaching style and choices in curriculum, and differentiated instruction is encouraged; however, not every teacher knows how to use it or chooses to use it. Understanding why some teachers choose to use differentiated instruction and how the strategy is implemented can benefit the school's policies and procedures for accommodating all their students and can help determine what professional development is needed to best support the educators.

Differentiated instruction is an alteration to curriculum and lessons that consider students' learning styles, experiences, interests, and abilities (Tomlinson, 2000). A differentiated classroom is student-centered, not teacher-centered, with the focus on the quality of student work, not the quantity of material covered. The teacher is the facilitator of information in the differentiated classroom, with students expanding their knowledge through hands-on experiences and research (Ginja & Chen, 2020; Robinson et al., 2014; Shareefa, 2021). Based on the differentiated instruction model Tomlinson created, students complete learning profiles, and teachers can alter the content, process, and product of their lessons by looking at students' readiness and interest found in the student learning profiles.

Institutions that use differentiated instruction have a stronger learning climate; teachers report spending more time preparing for lessons and rate their students' motivation as high (Smit & Humpert, 2012). Differentiated instruction also has a positive impact on students since they are given choices for how to work through the content of each lesson and demonstrate their knowledge. Students are encouraged to use their own experiences to help make meaning of the current material. Educators differentiate their instruction in a variety of ways, such as using choice boards, cooperative grouping, connection strategies, previous knowledge, and enrichment activities (Robinson et al., 2014). Researchers have found when students use their own experiences to learn new information, they have a greater enjoyment of learning, better achievement scores, and demonstrate a higher level of responsibility for their learning (Kolb, 1984; Tomlinson, 2014). Current literature suggests that some teachers see differentiation as an instructional tool that yields confidence in teachers and students for learning, creates a collaborative environment, and raises students' achievement (Olicia, 2016; Stavrou & Koutselini, 2016). However, many learning institutions do not use differentiated instruction due to teachers' lack of knowledge on how to differentiate, the time required, and negative perceptions of the model (Ginja & Chen, 2020; Idrus et al., 2021; Scarparolo & Subban, 2021).

The lack of knowledge and confidence in implementing differentiated instruction into the classroom seems to be a common concern for many educators. Although many studies are aligned with Tomlinson's (2014) contention that students experience with the material should be the center focus of school rather than assessment and testing scores, this is not a universal view. Some teachers find it difficult to apply differentiated instruction to their instruction (Bondie et al., 2019; Turkey et al., 2021). Common barriers seen throughout current literature are a lack of professional development on differentiated instruction, time constraints, strict standards that must be met, and lack of administrator support (Godor, 2021; Heng & Song, 2020; Lang, 2019). However, those institutions using differentiated instruction found that even with the challenges, implementing differentiated instruction brought positive benefits to the whole school (Olicia, 2016; Robinson et al., 2014).

Most of the literature on differentiated instruction focuses on strategies and the success students have when they are taught with differentiation (Dixon et al., 2014; Laballo et al., 2021; Malacapay, 2019). Currently, there is a gap in the research, particularly with private middle school teachers, on teachers' perceptions, expectations, and experiences using differentiation. While there are many studies that support the implementation of differentiated instruction to enhance different student learning styles (Gibbs & Beamish, 2021; Ginja & Chen, 2020; Haymon & Wilson, 2020; Laballo et al., 2021), there is limited research that seeks to understand how teachers process and align their perceptions of, expectations about, and experiences with implementing differentiated instruction. To address this gap, I conducted a case study. Yin (2011) posited that the value of a case study approach is to explore real-life situations and preserve contextual conditions that influence the experience. This case study sought to explore, through the eyes of the fifth- through eighth-grade private school instructors, perceptions about differentiated instruction, teachers' understanding of the expectations of the school administration and parents for differentiation, the teachers' personal expectations for differentiated instruction, and the teachers' experiences with differentiated instruction.

#### **Problem Statement**

Reaching students of all learning styles and intelligence is a critical issue facing educators in the 21<sup>st</sup> century. Despite the fact many teachers today recognize that all students are different and vary in academic abilities and intelligence (Stavrou & Koutselini, 2016), little is being done to differentiate the curriculum and the presentations of the material being taught (Tomlinson & Santangelo, 2012). Many teachers believe differentiated instruction is not necessary, takes too much time, and is a barrier to achieving mandated curriculum goals for the year (Laballo et al., 2021; Scarparolo & Subban, 2021). A possible cause of this conviction is a lack of teacher understanding of differentiated instruction, and how to effectively adjust curriculum and lessons to fit all students. As such, I identified a need to explore middle school teachers, in a private school in a south-central state, and their perceptions of, expectations about, and experiences with, differentiated instruction. The majority of studies conducted have focused on public schools. Researching teachers' perceptions about differentiated instruction in a private school setting offers the opportunity for a broader understanding about differentiated instruction.

#### **Nature of Study**

It is essential that the perspectives of instructors directly involved in the application of differentiated instruction be the focus of the data collection. For this study, I used a case study approach to investigate the experiences and perceptions of differentiated instruction for middle school faculty in a private school located in a southcentral state. At the time of the study, the school's population was approximately 1,316 students with 78 instructional faculty members.

The school is considered a prestigious private school with a low student to teacher ratio and a strong college prep curriculum. The qualitative case study method was appropriate for the intent of this research to explore private middle school faculty teachers' perceptions with, expectations of, and experiences using differentiation in their classroom. The approach allowed for the examination of real-world situations and experience (Yin, 2014), and provided a basis for the understanding and application of strategies to implement differentiated instruction in other similar scenarios and expand research into other educational settings.

I used a questionnaire, interview, and my analysis of the responses as my triangulated forms of data. Wargo (2014) believed the value of triangulation is its verification of the integrity of data interpretation by using more than one data source, multiple perspectives, and multiple data checks. The method was as follows: (a) identified a panel of three people composed of two teachers and the head of the middle school to help develop questions for the questionnaire and interview; (b) recruited participants (teachers) through purposeful sampling for the questionnaire and interview; (c) transcribed interviews; identify common themes and patterns in responses; and (d) shared results with participants to verify meaning and intent; and write the 'story' of the school's experience with differentiated instruction.

I recruited fifth through eighth grade English, science, history, and math teachers to participate in the audio interview and complete an initial questionnaire. The following criteria guided the teacher participant sample recruitment: (a) participants must have had at least 3 years of teaching experience; (b) teachers must be actively teaching either English, science, history, or math at the time of the study, and (c) participants must have had some experience, good or bad, in using differentiated instruction in teaching their subjects. The total anticipated number of participants was six. The rationale behind the sample size was the study only explored middle school teachers actively teaching in the following disciplines: English, Science, History, and Math. At this school site, differentiated instruction was highly encouraged but not used by all teachers. The purpose of the questionnaire was to explore instructors' experiences with, and perceptions about, differentiated instruction. Semistructured interviews that allowed for initial query and follow-up were conducted to clarify and expand questionnaire information. The interviews were audio-taped, transcribed, coded, and classified into topics for identification of patterns and trends. The transcripts and preliminary findings were provided to interviewees for their review. The purpose of the interviewee review was to allow participants to provide feedback on accuracy and authentic representation of responses, feelings, perceptions, and perspectives. Seidman (1995) advised that a review be conducted in enough time so as not to lose the connection between points of discussion.

I suspended my own assumptions, judgments, and perceptions to objectively review the interview data. After receiving the answers to the questionnaire and the follow-up interviews, I objectively analyzed the data. In accordance with Seidman's (1995) advice that data analysis is inductive rather than deductive, I accepted findings and reported themes and patterns as they emerged. Recurring statements and relationships among interviewee statements and experiences were noted, given specific codes, and eventually sorted into categories. This careful process elucidated the identification of themes.

#### **Research Questions**

Differentiated instruction involves multiple instructional concepts and strategies, including active learning, curriculum development, technology integration, and professional development. Teachers' effectiveness in implementing differentiated instruction in the classroom depends on many factors, including perception about the practice, understanding of technique, skill, practice, and confidence (Tomlinson, 2001; 2014). The central purpose of the following research questions was to guide the focus of data collection in exploring teacher perspectives and experiences regarding the implementation of differentiated instruction.

Research Question 1 (RQ1): What are private middle-school teachers' perceptions on the need for differentiated instruction in the classroom?

Research Question 2 (RQ2): What are the perceptions of private middle-school teachers with implementing differentiating instruction in their classroom?

Research Question 3 (RQ3): What value do private middle-school teachers perceive in differentiating their instruction?

Research Question 4 (RQ4): What strategies do private middle-school teachers identify as best practices for differentiating instruction in the classroom?

#### **Research Objectives**

In order to explore the private middle school teachers' perceptions, understanding, and implementation of differentiated instruction, demographic profiles, interviews, and an online questionnaire were used to triangulate results. The interview and questionnaire helped me to understand more about why teachers choose not to differentiate instruction and what challenges, such as perceptions about time, class size, classroom management, student differences, professional development, present barriers. The study also solicited teacher perceptions about resources, experiences, and collegiality that are helpful in differentiating instruction. The data gathered was used to address the following research objectives:

- Understand attitudes and feelings toward the method.
- Understand what individual teachers who already identify as differentiators are currently doing.
- Understand what teachers perceived were best practices for differentiation. Understanding these objectives helped explain how teachers view differentiated instruction. The objectives were useful in illuminating what teachers feel is necessary to employ differentiated instruction and can inform the school's professional development practices. Additionally, knowing how teachers are already using differentiated instruction guided the exploration into what is and is not working.

#### **Purpose of the Study**

The purpose of this qualitative case study was to explore, in a private school in a south-central U.S. state, middle school teachers' perceptions of, expectations about, and

experiences with differentiated instruction. The study population and site were middle school teachers from a south-central state private school with no state-mandated curriculum and a diverse student population, in terms of race, religion, socioeconomic status, and learning differences. Although private schools do not have the same curriculum standards as public schools, they do have academic expectations that must be met to help the students grow academically (U.S. Department of Education, 2009). Theorists have found that students have higher achievement scores and enjoyment for learning when they are instructed with differentiated lessons and can use their own experiences to learn new information (Kolb, 1984; Tomlinson, 2014). There is a suggestion in some literature that teachers may see differentiation as an instructional tool that yields confidence in teachers and students, creates a collaborative environment, and raises students' achievement (Ginja & Chen, 2020; Olicia, 2016; Shareefa, 2021). However, there are learning institutions that do not use the differentiated instruction model, due to the lack of knowledge on how to differentiate, the time required, and negative perceptions of the model (Idrus et al., 2021; Turkey et al., 2021).

#### **Theoretical Framework**

The theoretical framework of Tomlinson's (2014) differentiated instruction grounded this study. Not every child learns the same; therefore, to reach all students, teachers need to adapt their instruction to include the diversity of academic abilities and cultural backgrounds of each student. Differentiated instruction is a learner-centered approach to teaching and allows children to gather knowledge based on their individual learning style or intelligence (Tomlinson, 2005). Tomlinson (2005) believed that because students vary in strengths and preferences, teachers must first know their students and then use time, space, material, and strategies to access those strengths. However, if teachers do not know how to differentiate lessons or appreciate the importance of this type of instruction, they are unable to differentiate their classroom and reach every student academically.

In the late 1900s, Tomlinson devoted years of research to find ways for teachers to reach all learners in their classroom. She found that although students learned differently, much of the curriculum and lessons were designed for a one size fits all classroom (Sousa & Tomlinson, 2011). After much discussion and consultation with other educators and using her own teaching experiences, Tomlinson created the differentiated instruction model to help aid educators reach students' individual intellects while still teaching the standards. Her intent was for the model to be a guide for educators and learning institutions, to help simplify instruction, reach each student, and make lessons relevant.

The model presents how teachers can differentiate instruction based on students' strengths. Tomlinson (2005) discovered four ways that teachers can vary instruction: (a) content – the information or ideas that the students are learning; (b) process – how students will learn the information and make sense of the content being discussed; (c) product – how students demonstrate what they have learned from the content; and (d) learning environment –adjusting the classroom to make it more inviting or conducive to the lesson. To adjust any of the four areas, teachers can look at three things in students: (a) readiness – how prepared a student is for the coming topic, what their previous

knowledge is on the subject, how motivated they are to learn; (b) interest – what motivates students; what topics and activities they enjoy doing and learning about; and (c) learning profile – a file that contains how students make meaning, what their multiple intelligences are, their previous experiences and background, and what motivates them (Tomlinson, 2014). Each of these areas should be carefully examined by the teacher to determine what aspects of a lesson can be differentiated. Tomlinson did not expect teachers to differentiate every lesson in all four areas, or to differentiate every lesson every time (2005). However, Tomlinson maintained that the greater degree to which teachers could use the student's readiness, interest, and learning profiles to differentiate lessons, the easier and more enjoyable the lessons could become for the students.

#### **Operational Definitions**

For the purpose of this study, the following terms are defined.

*Differentiated instruction:* provides a rich and stimulating learning experience for all students that connects the material taught in the classroom to students' abilities and strengths building (Tomlinson, 2001).

*Interest level*: Tomlinson (2001) felt students' interest level is determined by what motivates them and what topics and activities they enjoy doing and learning about. Interest is also the feeling or emotion that causes students to focus on a specific topic or lesson.

*Learning profile*: a file that contains how students make meaning, what their multiple intelligences are, their previous experiences and background, and what motivates them (Tomlinson, 2014).

*Readiness level*: how prepared a student is for an upcoming topic, the student's previous knowledge on the subject, and how motivated the student is to learn (Tomlinson, 2001). Readiness is also considered to be the current proximity of understanding and skill to proximity of understanding and skill to engage in study (Sousa & Tomlinson, 2011).

#### Assumptions

In order to organize and conduct a research study, the researcher must make certain assumptions (Simon & Goes, 2013). I identified two assumptions I held about this study. First, I assumed the teachers that participated in the case study were honest and open with their responses. Second, I assumed that I was able to maintain an awareness of my verbal and body language to avoid revealing any intentional or unintentional bias during interviews and conversations with the teacher participants.

#### Limitations

It is important to disclose any influences or methodological restrictions that may impact the outcome of the research. Limitations refer to the method and research design, and in reference to qualitative research, impact the validity and reliability of the study (Simon & Goes, 2013). Wiersma (2000) holds that replication of a qualitative study is difficult due to its naturalistic setting. This study did not include all teachers at the school, since only teachers for English, science, history, and math were recruited. Teachers in other disciplines may differentiate their instruction but their perceptions were not sought. Administrators, faculty in other disciplines, and students were not interviewed as they were outside the scope of the study. A narrative qualitative research design could have investigated this limitation, but since the participants in this case study were from the same private middle school, results are not representative of a wider population and not generalizable to other research on teacher differentiation of instruction. The second limitation was the possibility that subjective feelings and emotions would influence the results. The study was comprised of interviews and an open-ended questionnaire, allowing for some risk for researcher bias during the interpretive phase of the study. A third limitation was the possible hesitation teachers may have had for answering authentically about their perceptions of differentiated instruction, and expectations for, and by others, of the application of the method. Understanding that these limitations posed constraints to the conclusions that were drawn from the study, I strove to thoroughly explore the problem from the teachers' perspective, and not to make causal inferences.

#### **Scope and Delimitations**

Delimitations of a study refer to the issues that arise from limitations in the study scope (Simon & Goes, 2013). This study was restricted to the examination of teachers from only one private middle school within one city in south-central state. A case study was chosen for this study, and all other forms of research have been omitted because they are not aligned with the intent of this study. The educators used in this research are fifth through eighth grade English, science, history, and math teachers. For the purpose of this study, I did not interview administrators, students, parents, or other grade-level teachers because they are outside the scope of the study. I omitted teachers who did not have experience differentiating instruction since the purpose is to explore teachers' perceptions and use of differentiated instruction. Other private elementary schools and high schools, public schools, and charter schools, were excluded since they are not within the research scope. Lastly, literature that focused on students' reactions to differentiated instruction, various strategies that are used, and in-depth professional development approaches were not assessed.

#### Significance of the Study

The intent of differentiated instruction is to make students and their learning the focus. Differentiated instruction helps learning institutions reach the diverse learners in their buildings and classrooms, addressing the needs of students with a wide range of abilities and previous experiences (Sousa & Tomlinson, 2011). Designing lessons with all learners in mind allows the instruction to help students transfer their knowledge outside of the schoolroom and into their communities. By studying the different perceptions of differentiation held by teachers, this study illuminated for administrators and policy makers how to best support the teachers in implementing the teaching method. The goal of this study was to contribute to the limited research on teacher perceptions of, expectations about, and experiences with, differentiated instruction. Intellectual organizations have evolved from a one-room schoolhouse that focused on individuality to an institution more concentrated on standards and ready-made material like textbooks and worksheets to teach standards. Additionally, with the use of differentiated instruction, just meeting standards no longer takes precedent; rather the students and experiences become the focus. When Dewey (1990) first started his research, he saw that the need for handson experiences was relevant. Kolb (1984) recognized the need to see every learner as

unique in their own way and allow experiences to lead them to meaning. Society shifted away from this and put pressure on learning institutions to teach standards that were hard to meet for some, adding stress and frustration in schools (Kolb, 1984; Tomlinson, 2014). However, differentiated instruction helps educators address the needs of diverse learners and reach all students with a wide range of abilities and previous experiences within the same classroom (Sousa & Tomlinson, 2011). By designing lessons with all learners in mind, instruction can help students transfer their knowledge outside of the schoolroom and into their communities. With an increased demand for an educated workforce, there is considerable interest in the topic of effective teaching to prepare learners to meet the demands of the 21st century. Likewise, teacher perception about the barriers and limitations of differentiating instruction is useful for structuring their classroom practice (Tomlinson, 2014).

#### **Summary and Transition**

Differentiated instruction is a learner-centered approach that helps teachers plan and implement lessons that will meet the learning needs of students and help them connect content to the real world outside of the classroom (Tomlinson, 2014). With the use of differentiated instruction, teachers can create learning environments that allow students to explore content and use their interests and experiences to create meaning and deeper connections. There is a significant amount of current research that discusses how to implement the method into the classroom; however, there is a lack of research regarding private middle school teachers' perceptions of, expectations about, and experiences with, differentiated instruction. Consequently, there was a need to explore how private middle school faculty define, interpret the need, believe in the value, and their experiences implementing, differentiation in their classrooms.

Chapter 2 includes a detailed review of the literature examining the perceptions of differentiated instruction amongst teachers. The chapter identifies and discusses the difficulties teachers face when trying to implement differentiation, the training that teachers receive on differentiation, and how the method is currently being used by educators in schools. Chapter 3 explores in detail the research method, which grounds this study. Chapter 4 explains the research findings from this study, and Chapter 5 provides a conclusion to the study, and recommendations for the school and future research.

#### Chapter 2: Literature Review

In recent years education has experienced a shift towards state-mandated standards and standardized testing results. Often, these standards, and the curriculum to meet each standard are designed with one type of student in mind (Miller et al., 2020). The movement to standard- driven curriculum has led to a narrow view of education in the United States and has created challenges for educators to reach all the students in their classroom (Kloss, 2018). Societies and innovations evolve, and educational practices change as well. Learning institutions have realized the curriculum should be adjusted to meet the needs of all the students walking through their doors (Fullan, 2016; Miller et al., 2020). Research on effective instructional methods and practices continue to uncover how best to reach all students. Differentiated instruction is not a set of strategies but a teaching framework that aims to reach all students at their ability level (Tomlinson, 2014). Chapter 2 explores differentiated instruction, the research by Tomlinson, and considerations for creating student-centered instruction. Using Tomlinson's foundational theory and current literature, teachers' perceptions, perceived limitations, and teachers' experience with the implementation of differentiated instruction are analyzed.

To address middle school teachers' perceptions of, expectations about, and experiences with differentiated instruction, peer-reviewed journal articles, dissertations, books, and other publications provided support for this study. Using the Walden University library, ERIC, ProQuest and the search engine Google Scholar, I used keyword searches to look for articles related to the use of differentiation in the classroom, implication of differentiated instruction, teachers' perceptions of individualized instruction, middle school instructional practices, and limitations that prevent teachers from differentiating instruction. Terms such as *differentiated instruction, individualized instruction, teachers' perceptions, differentiation in middle schools, limitations, private schools, instructional practice, implementation,* and *use of* were used together or separately to search for teachers' perceptions, anticipations about, and involvements with differentiated instruction.

#### **Theoretical Foundation**

The foundation of differentiated instruction is based on the instructional philosophy of Tomlinson. In the last half of the 20th century, Tomlinson devoted years researching how teachers could better change their instruction to fit all learners in their classroom. Tomlinson found although students learned differently, much of the curriculum and lessons were designed for one-size fits all classrooms, with the expectation that every student could learn the same way and with the same material (Sousa & Tomlinson, 2011). Tomlinson's beliefs and findings are supported by research from Gardener (1993), Bruner (1977), and Dewey (1990), who found that all students have their own way of learning. Based on her own experiences and feedback from colleagues, Tomlinson developed differentiated instruction. Differentiated instruction is a teaching philosophy, or framework, grounded in knowing and responding to students' abilities and needs. According to Tomlinson (2000), curriculum tells teachers what to teach and differentiation is a guidepost for how they will teach the information.

Differentiated instruction is an approach to teaching that helps educators create relevant experiences and adjust content and material to match students' capabilities. It is

not new; the concept can be traced to the single room schoolhouses where a teacher taught multiple students varying in age and ability. The content was based on the local needs of the time, and what could benefit the students and community beyond the schoolhouse confines. As communities grew, and government became more involved in curriculum decisions, education began to focus on expectations for curriculum standards and assessment scores (Kloss, 2018). With the rise of urban centers and larger school enrollments, grade level classrooms replaced one-room schoolhouses, the curriculum became more standardized, and the focus of instruction was less on the individual needs of students and more on the completion of specific task-related objectives (Dewey, 1990; Sousa & Tomlinson, 2011). Often, differentiated instruction is misunderstood as being a one-on-one teaching episode or having to design individual lessons for each student. Tomlinson (2014) did not view differentiated instruction as solely focusing on the completion of a task to gain new knowledge, but rather that during lessons teachers have an opportunity to design multiple learning options and choices that should be useful and enjoyable for both the student and the teacher.

Over time, teachers have defined differentiation in various ways. The philosophy is student-centered and provides various types of instructional and learning strategies to offer different options for learning (de Jager, 2017; Jackson & Evans, 2017; Netcoh & Bishop, 2017). Differentiation also aims to prepare curriculum and lessons based on students' needs, interest, readiness, abilities, and learning profiles (Turner & Solis, 2017). Supporting the learning environments where various paths and opportunities are given to each student according to ability and learning preference is the hallmark of differentiated teaching (Tzanni, 2018). The notion that teachers have various definitions for differentiation is supported in the literature. While there are variations among the different views, the commonality of the approaches is that all are learner-centered and offer various learning opportunities for students. Embedded in the different applications of differentiated instruction are various perceptions of the effectiveness and practicality of using the differentiation framework for instruction.

#### Perceptions

Educators' opinions and experiences seem to impact their perceptions of differentiated practices. Tomlinson (2014) asserted that teachers have mindsets that can impact their perceptions and instruction. Mindsets can also guide educators' assumptions, expectations, and beliefs, which impact their behavior and actions (Sousa & Tomlinson, 2011). Educators may not be cognizant of the impact their perceptual outlook has on their instruction, beliefs, and actions regarding differentiation. A change in instruction is usually successful only if educators see the value in the teaching ideology and have the appropriate mindset for application (Tomlinson, 2014). The results of the current literature revealed mixed perceptions about the value of differentiated instruction, and if or how the implementation is impacted.

#### **Positive Perceptions**

#### **Benefits For Teachers**

Rather than focusing on the limitations of differentiation, some teachers recognize and appreciate the benefits differentiated instruction adds to a learning situation. Legislation in recent decades has advocated for the reexamination of teachers' roles, and instruction that reaches all students (Lang, 2019). Teachers from the NMSA advocate a responsibility to create life-long learners by engaging their students in meaningful instruction (DiCicco et al., 2016). For instruction to be meaningful educators should consider what their students need. Teachers in most schools, both private and public, recognize that within the diverse classroom populations students have various needs and do not learn in the same ways (de Jager, 2017; Gibbs & Beamish, 2021; Laballo et al., 2021; Pilten, 2016). Some teachers perceive the teaching approach as essential, observing that since students are different and receive information in various ways, learner-centered differentiated instruction allows lessons to focus on student needs during the learning process (Van Geel et al., 2019).

Based on current literature, teachers' perceptions of differentiated instruction are often linked to their self-efficacy. Teacher efficacy is the belief in their own ability to create desired outcomes for all their students (Whitley et al., 2019). Whitley et al. found that teacher' efficacy was positively affected by their use of differentiation; the more they used differentiation in the classroom, the more positive teachers felt about their abilities. Suprayogi et al., (2017) also uncovered a significant connection between self-efficacy and implementing differentiation. When teachers possess confidence, the fear of failure may not be a deterrent from attempting to differentiate instruction. Haymon and Wilson (2020) found when teachers felt confident to try differentiation, the implementation of differentiated instruction was successful.

#### **Benefits For Students**

When lessons are differentiated students achieve a level of responsibility for learning, which teachers appreciate. Several studies in the current literature showed that teachers saw differentiation as a means for student involvement and greater responsibility. Teachers conveyed that differentiated instruction helps students develop independently and confidently as a learner (Tomlinson & Imbeau, 2010). Kloss (2018) observed differentiated instruction encouraged students to explore content independently because students had time, space, and choices. With the use of differentiation, students embraced their new roles and took responsibility for their learning. Stavrou and Koutselini's (2016) study showed that students desired more responsibility and liked playing a role in what is being taught and how it was carried out. Another study found comparable results; students gained responsibility when they were allowed to choose the activities or strategies they wanted to use in the process of a lesson. This level of responsibility improved the students' involvement with the lessons and achievement, while also eliminating the pressure they felt to succeed on assessments (Tobin & Tippett, 2014). The choices and responsibility that are given to the students through differentiation shows them that they are more than just a learner; they are a part of a team that is working to create and apply knowledge, which is why teachers think differentiation is a positive way to implement instruction (Stavrou & Koutselini, 2016).

Teachers expressed that this level of responsibility improved students' involvement with the lessons and achievement of learning goals (Coubergs, et al., 2017). Educators that gave students a voice in how projects would be completed discovered that students enjoyed learning more, took more responsibility in what they were doing, and enjoyed the responsibility of taking on their projects themselves (Netcoh & Bishop, 2016). In a study conducted by Cavilla (2014), the teacher gave her students the responsibility to choose what type of project they wanted to do to demonstrate what they had learned. The students took the responsibility serious and not only learned more, but also enjoyed what they were doing. When students were given the responsibility to help choose the type of material and products best suited for the unit, teachers felt some of the pressure was alleviated for ensuring students master outcomes (Ginja & Chen, 2020; Godor, 2021; Jackson & Evans, 2017).

Teachers also viewed differentiation as a way to improve students' success in and out of school, as well as their enjoyment for learning. Scarparolo and Subban (2021) found that when the norms of a school were to use the differentiated instruction model, students' achievement and scores rose. Similarly, Haymon and Wilson (2020) saw a significant difference in students' scores after differentiating their content, as compared to when traditional methods of instruction were used. The study revealed that the students learned more through experiences with the content using technology, and their enjoyment for learning also increased.

#### **Collaborations**

When differentiated instruction is employed, collaborations between teachers and students can occur improving the instruction and learning experience for both. Jackson and Evans (2017) found when teachers implemented differentiated instruction, a stronger relationship between teachers and students formed. They believed this was because

teachers spent more time with their students to learn their interests and abilities, which resulted in a more proper differentiation. A teacher in Netcoh and Bishop's (2016) study felt working closely with students made the classroom environment feel more like a family and differentiation more enjoyable.

Differentiated instruction also benefited relationships and collaborations amongst colleagues. How often teachers collaborated with others directly correlated to their use of differentiation (Goddard et al., 2015). According to Tomlinson (2014), it was important for teachers to collaborate with fellow teachers on differentiated instruction ideas and strategies. By collaborating on ideas and strategies to use in the classroom, educators believed fellowship increased (Suprayogi et al., 2017). Lang (2019) and Shareefa (2021) studies showed that differentiating was easier when educators worked as a team and teachers had support from coworkers. In a study conducted by Hartwig and Schwabe (2018) the researcher sought to discover if there was a relationship between colleague collaboration and teachers use of differentiated instruction. They found that collaboration led to more differentiation because teachers were motivated by one another alter their teaching approach (Hartwig & Schwabe). When teachers worked together, information was shared that was beneficial for all teachers (Shareefa).

Current research showed that some schools encourage their faculty to work together when designing lessons and discuss how they differentiate so that they may have a better understanding of how to apply differentiated instruction. Ginja and Chen (2020) and Scarparolo and Subban (2021) found that when teachers worked together, they learned new strategies that had already worked for others and built deeper relationships with one another. Through these collaborations, teachers gained new understanding for how to use differentiated instruction more effectively in their lessons. When teachers met together and share their strategies, they also had the opportunity to receive feedback from their colleagues. Teachers considered feedback very helpful and continue to ask for it because they see the benefits it can bring them such as clarity, understanding, new ideas to consider, and how to adjustment and implement new strategies (Scarparolo & Subban).

#### **Negative Perceptions**

Although some teachers had positive perceptions about differentiated instruction, the literature also reveals negative aspects reported by teachers. Some teachers question if the teaching approach is worth the effort, view differentiation as a fad that would eventually fade, and determined there was no reason to learn how to differentiate their instruction (Turner & Solis, 2017). Stone (2018) considered differentiated instruction as a band-aid for an already flawed system. He believed that modifying the curriculum is not enough, and more needs to be done to fix the educational system so that every child is learning and getting the same education. In the same way, a positive mindset can impact a teacher's perception of differentiated instruction was a dispensable instructional tool and perceived the approach as useless and impossible to carry out. Regardless of the reason, a negative mindset affects teachers' willingness and ability to differentiate in their classroom (Coubergs et al., 2017; Tomlinson, 2014).

Not all believed differentiated instruction is student focused and can meet the needs of all the students. Stone (2018) felt that learning is still designed around a

curriculum-centered approach, meaning the curriculum is the center of the school, not the students. While Stone recognized that differentiated instruction was an attempt to change schools to a learner-centered approach, he did not believe differentiation would be enough. Stone's view contrasts with Tomlinson's belief that differentiation was learner-centered, and that teachers study their students to alter their curriculum in order to provide support for their learning.

The endeavor of differentiating instruction means teachers must change the way lessons and content are delivered. Tomlinson (2014) recognized asking teachers to change their instructional approach was not a simple or trouble-free request. Teachers may already have established methods of instruction and not feel a need to change their approach. Hewitt and Weckstein (2012) discovered teachers were resistant to instructional change because they could not see the benefits of differentiation as worth the effort. Tzanni (2018) found younger teachers were more inclined to differentiate lessons than veteran teachers. Tzanni posited younger teachers had not developed entrenched teaching habits, so were willing to take time to alter their curriculum to fit students' needs. A negative mindset may render teachers unable to see the need to change their instruction and approach lessons in a novel way.

Differentiation may negatively impact teachers' emotions. Teachers' attitudes affect efforts, persistence, and resilience in the classroom, and self-perception (Godor, 2021). Hertberg-Davis and Brighton (2006) ascertained emotions impacted teachers' willingness to differentiate instruction. Without self-confidence, fear of failure could hold teachers back from adjusting their instruction. Teachers in Aldossari's (2018) study knew their confidence stood in the way of differentiating. Even with knowledge of the differentiation framework, teachers' perceived weakness in their abilities made it too difficult to overcome to attempt differentiation.

#### Limitations

There are many reports in current literature about difficulties and limitations teachers encountered when trying to differentiate their instruction. Often teachers did not alter their instruction because the challenges and limitations were perceived as too hard to overcome (Godor, 2021; Scarparolo & Subban, 2021; Smith & Robinson, 2020; Turkey et al., 2021). While Tomlinson (2014) believed teachers did not have to work as hard when implementing differentiation, other teachers argued the various limitations that hindered their ability to differentiate lessons resulted in too great of a struggle.

# Experience

Low confidence and fear can prevent teachers from differentiating instruction. Teachers in two different studies, de Jager (2017) and Scarparolo and Subban (2021) had the desire to differentiate and create change within their classroom environment but lacked confidence in the delivery. Other teachers echoed those fears and voiced reluctance to try differentiating because they did not feel they knew enough (Moosa & Shareffa, 2019; Tobin & Tippett, 2014). Tomlinson (2014) understood differentiation was not easy and could cause fear. She advised that unless teachers tried and learned from their adversities, they would never learn how to differentiate their lessons. Fear and lack of knowledge may be a strong deterrent for some teachers who see differentiation as too difficult and something that can reveal their instructional weaknesses. Studies by Laballo et al. (2021) and Whitley et al. (2019) showed teachers were aware of students' differences but due to a lack of knowledge they were unable to differentiate their lessons to meet the needs of their students. Often, teachers have the desire to differentiate and create change within their classroom environment, but they do not know how and fear they will damage the lesson (Dixon et al., 2014). Tobin & Tippett discovered teachers were unsure of themselves and their ability to properly differentiate their instruction; their fear kept them from trying. Scarparolo and Subban (2021) saw first-hand that a lack of knowledge and confidence could prevent any teacher from differentiating, including those that have learned differentiation strategies. No matter how much the teachers in their study knew about differentiation, their low confidence and fear of possible failure kept them from implementing differentiated instruction.

While some teachers see their fears and perceived lack of knowledge as a limitation, some students demonstrated teachers can move past this limitation. Some teachers were willing to try to differentiate, even if they feel unable, and after time their skills and ability improved (Moosa & Shareffa, 2019). However, for some teachers, it is not just about change, but the lack of ease to differentiate their instruction that makes them perceive the model as too difficult to carry out. Using the differentiated instruction can seem very daunting to some teachers. The effort and ability that is required to differentiate lessons can be very overwhelming and add a lot of undue pressure and fear, both of which limit teachers from differentiation (Dixon et al., 2014).

# Mandated Standards

Federal and state government policy changed education to be focused on standards and testing results (Miller et al., 2020; Tomlinson, 2014). As reported by teachers, many difficulties with differentiating may be attributable to mandated standards. Although some teachers believed differentiation was reasonable and needed, teachers also voiced that it was impractical because they already had to work too hard to teach and complete each standard (Turner & Solis, 2017). The same mandates do not apply to the private school in the study because they are not state funded. While they do not have to meet certain state and federal standards there are school standards that each teacher is expected to meet for the school year. Some teachers expressed that as a result of the pressure, many schools prepare students more for assessments instead of life and worldly experiences (Pilten, 2016). One teacher conveyed that educators were "... teaching so much to the test and these kids are actually going to struggle in a career because they are so used to learning for one specific purpose instead of applying what they have learned to many things" (DiCicco et al., 2016, p. 4-5). Other studies supported these opinions, finding that teachers perceived differentiated instruction as too difficult to implement and meet the required standards (Godor, 2021; Idrus et al., 2021; Turkey et al., 2021). The amounts of daily work required of teachers added undo pressures and burdens making the efforts of differentiation and completing standards too grueling (Aftab, 2016; Coubergs et al., 2017; Gibbs & Beamish, 2021; Laballo et al., 2021; Turner & Solis, 2017). Just meeting standards is not enough, the goal should be for each student to grow as much as they can as a learner (Tomlinson, 2014). The pressure to get everything done was too

great for some teachers and held them back from employing the differentiation framework.

Rather than standards being the guide for each lesson, meeting the expected outcome of the standards has become the driving force in the classroom (Tomlinson, 2014). While Tomlinson believed differentiation was possible for all, she was not naive about the time it took. When teachers only focus on meeting standards, genuine leaning is not occurring, and differentiation can be hard to carry out (DiCicco et al., 2016; Tomlinson, 2014). With the pressure to meet standards, there is often not enough time in the school day to get everything done (Kolb, 2015). Teachers fear if they differentiate their lessons, they will not be able complete all the standards that they have to within a set amount of time (Tobin & Tippett, 2014). Other teachers felt that they could try to differentiate instruction but did not because they would never be able to keep up the pace that was needed if they have to wait for each student to master all of the standards (Godor, 2021). A lot of teachers perceive differentiated instruction as a barrier that keeps them from completing all their standards; they do not feel they can risk losing any time in the classroom to adjust the lessons; therefore, the instruction is not differentiated.

# Time

The literature revealed that time to plan was indeed a problem. Teachers in Aldossari's (2018) study felt the number of standards and time to cover each standard did not equate. Due to the pressure to meet standards, many teachers believed differentiating their instruction was not possible because it took too much time to plan and execute the method in the classroom (Aldossari, 2018; de Jager, 2017). Many educators felt they did

not have enough time to plan and implement each standards-focused lesson. Implementing differentiated instruction is not a fast process; rather, it is a journey (Walden, 2013). Part of the journey to differentiating is the preparation time required for each lesson. Due to the time required for meeting standards, not having enough time to prep their lessons and cover the entire curriculum for the year was a real barrier; consequently, some teachers did not differentiate their instruction.

Without the proper time to prepare lessons, differentiated instruction can be difficult for some teachers. Some teachers held the opinion that applying changes to the curriculum was too daunting of a task without time to prepare first (Nazzal, 2011; Siam & Al-Natour, 2016). Teachers felt they were often racing the clock to prepare lessons and finish the curriculum standards (de Jager, 2017; Idrus et al., 2021; Scarparolo & Subban, 2021). To differentiate instruction, teachers need time to analyze what is best for each student. Jackson and Evans maintained some teachers spent time at night and on the weekends preparing for lessons and reflecting on previous ones. The participants in Jackson and Evans (2017) study believed the time spent outside of school to differentiate lessons was worthwhile, but they preferred time during the workday for preparation. Ginja and Chen's (2020) research findings showed that a lack of time was challenging; however, they did find the more the teachers worked at differentiating, the easier it became because their desire to do so outweighed the time constraints. Along with time, a lack of academic challenge was a limitation preventing teachers from differentiating instruction.

# Student Impact

Since differentiation adapts instruction to reach all the students in the classroom, some teachers may feel challenging students at all levels through differentiated instruction is an insurmountable barrier. Teachers in Scarparolo and Subban (2021) and Whitley et al. (2019) studies worried that if assessments were differentiated per students' abilities, rather than administering one form of assessment to all students, the new product would be weaker, and not challenge the students. Teachers were concerned that providing different options for the content, process, and product of a lesson can keep some learners from being challenged enough, while other students failed to master every standard (Whitley et al.). Other teachers had trouble finding ways to challenge students and teach the material needed to succeed on the standardized test required by the state (Jackson & Evans, 2017). Teachers found covering material for students at either extreme (weaker or higher) difficult; therefore, it was easier teaching students in the middle of the spectrum (Nicolae, 2014).

Some educators feel that differentiation allows for too much flexibility in lessons and assessments that can hurt the students learning growth and set lessons without differentiation makes it easier to achieve standards. The concern for some is that different assessment options can keep some kids from being challenged enough, while still failing to reach every standard with others (Jackson & Evans, 2017; Laballo et al., 2021). Tobin and Tippett's (2014) study revealed some teachers worried that if they differentiated assessments to fit students' abilities, rather than administering one form of assessment to all the students, the differentiated assessments would be too easy. Teachers expressed concerns about designing and grading an assessment fairly in a way that would indicate an accurate assessment of the students' abilities (Tobin & Tippett). There is some belief that differentiated instruction creates a water-downed curriculum and low expectation (Whitley et al., 2019).

#### Assessment

A common fear seems to be that altered assessments may be too easy and do not confirm that students have truly mastered a standard. Tomlinson (2014) believed differentiated instruction is not meant to create easy assessments, but rather show the ability to transfer knowledge; and when students can do that, they have still met the standard. To combat the concern of reaching all students, Tomlinson advocated the use of a *teaching up* technique to reach all students and create fair lessons and assessments. Using this technique, a teacher first plans lessons for the more advanced learners in the class, and then scaffolds the lesson for students at other levels. Teachers worried not every student would be doing the same work and assessment, and that students may be graded differently, which could cause equity problems of students' required effort and grades received for work (Turner & Solis, 2017). Teachers' concerns about their ability to create lessons that are appropriate to each student's level may result in a choice not to differentiate. Teachers might not be aware that differentiation is not meant to create easy assessments, but to allow students to demonstrate the ability to transfer knowledge. Sousa and Tomlinson (2011) assured educators that assessments can be differentiated and still be fair and challenging, especially when various content options for the same standard are offered.

### **Resources and Technology**

Curriculum often focuses more on memorization than meaningful context because teachers did not have many resources to choose from to differentiate lessons (Aldossari, 2018; Pilten, 2016). According to Tomlinson (2001), if teachers are to reach all students the content, process, and product should be altered to be appropriate for all levels in their classroom. Gaitas and Martins' (2016) discovered difficulty in finding materials beyond the textbook made it hard for teachers to adapt to the students' levels, interests, and learning profiles. Those that altered the material often used technology. Although educators wanted to use technology to differentiate instruction, obtaining the equipment in the schools was often challenging, resulting in teachers using more accessible textbooks and prepared materials. DiCicco et al. (2016) believed middle school students were motivated by technology and teachers discovered that when technology was used for the content, process, and product, students were able to learn more at their level versus using the textbook and commercially prepared material. Teachers in de Jager's (2017) study explored differentiation when teachers tried using the internet to access quick resources for altering content beyond the textbook. The studies exposed that since options and resources were limited, teachers were constrained to using either the textbook or computer for lessons. Teachers' inhibited access to current technology makes it hard to use it all the time; therefore, the lack of material for some teachers meant a less frequent differentiation of instruction.

A common theme found in the literature for teachers claiming to differentiate their instruction, was the use of textbooks for the content. Finding new ways to alter the

content was one of the most difficult practices to differentiate (DiCicco et al., 2016; Gaitas & Martins, 2016). For some teachers, it may be easier to use conventional approaches such as the textbook rather than alter their lessons. Studies conducted by Aldossari (2018) and Tobin and Tippett's (2014) found teachers used textbooks to cover curriculum goals because it was easier and saved time. With a lack of time, and the pressure to meet standards, using materials other than the textbook to teach lessons is difficult. Students may not receive the same hands-on experiences with test books that they would without (Dewey, 1990). Tobin & Tippett discovered participants' preferred textbooks they used to teach curriculum goals, considering the textbook option easier to use for instruction and often the only option available. Aldossari (2018) mentioned current instruction often includes textbooks and prepared handouts and caution that teachers should use predesigned curriculum less frequently and utilize other materials that better meet the needs of the students. However, the researchers noted many teachers may be dependent on prepared curriculum because they do not know how to create or locate other materials (Jackson & Evans, 2017).

Changing content requires teachers to learn new material and write new lessons to make the changes that fit the standard being taught (Herner-Patnode & Hea-Jin, 2021). Finding new material to appropriately challenge students and deepen their knowledge can be daunting for teachers (Jackson & Evans, 2017). Some teachers used the textbook not because it was good material, but because it was an easier source for content, and provided pre-prepared content (de Jager, 2017; Pilten, 2016). Moreover, the teacher edition of most textbooks includes premade material, which saves time in preparing lessons, something teachers felt differentiation hindered. Pilten (2016) found that teachers frequently used textbooks because it was difficult to find other options that would help meet the standards. The use of textbooks is often primarily a teacher-centered method of teaching, which contradicts the learning-centered method of differentiated instruction (Tomlinson, 2005). Although it may be easier to use a textbook, teachers recognized that using the textbook was not fair to low and high achievers since the text did not meet the needs of all students in the classroom (Chien, 2015). Teachers felt if they were differentiating in other areas, it was acceptable to use textbooks for the content (DiCicco et al., 2016).

### **Classroom Management**

An analysis of the current literature shows some teachers had trouble managing the classroom while differentiating instruction. For many teachers, the possibility of losing classroom control is a big fear (Turkey et al., 2021). Some teachers felt differentiated instruction added chaos to the classroom environment (Godor, 2021; Laballo et al., 2021). Teachers in Aldossari's (2018) study believed calmness and discipline could only happen when traditional instruction was used. When differentiation is properly carried out, the classroom looks much different; students are actively engaged with a variety of instructional materials and activities. When students were involved with a mixture of activities teachers felt it was impossible to manage behavior, and properly execute differentiated instruction, thus preferring traditional methods (Aldossar; Pilten, 2016). When instruction is differentiated learners often have more input and involvement; thus, the perceived chaos some teachers felt was due to a shift in control (Netcoh & Bishop, 2017). Several studies (Aldossari, 2018; de Jager, 2017; Pilten, 2016) confirmed teachers were unable to try new activities because they could not manage classrooms in the same way when all students were doing the same thing at the same time; consequently, teachers felt a loss of full control.

Although some teachers see classroom management as a limitation to differentiation, there are studies that showed managing the classroom is easier when differentiating instruction (Tomlinson, 2014). Based on the research findings for his study, Rel (2015) suggested that the more teachers get to know their students and differentiate their instruction, the more they can manage their classroom. One contributing factor Rel found was that students felt their teachers cared about them and their learning; therefore, the students wanted to do better. Part of what made classroom management so difficult was a direct result of the teaching environment. Teachers believed that a large class size made it more difficult to change the nature of their instruction (Aldossari, 2018). The larger the class size, the less educators felt differentiation was possible (Turner & Solis, 2017; Wan, 2016). Teachers in de Jager's (2017) study were unable to differentiate because the large class made it too difficult to support all learners. The teachers admitted that teaching all students at their level was not possible because content, process, and product could not be altered to fit each student. Although there were limitations that made it hard for some teachers to differentiate, others attempted to overcome the limitations.

# **Professional Development**

Gheyssens et al. (2020), Smets and Struyven (2020), and Tantawy (2020) offered professional development workshops in a school that focused on differentiated instruction. In these workshops teachers learned various techniques and strategies for differentiation, in addition to partaking in various simulations to experience what it would be like to be a student receiving differentiated instruction. Like students, educators need help and direction (Bondie et al., 2019; Herner-Patnode & Hea-Jin, 2021; Scarparolo & Subban, 2021). When administrators create an environment where teachers see the model as useful and purposeful, they are more likely to try the model. Through these experiences and demonstrations, teachers began to perceive the differentiated instruction as a positive means to designing lessons.

Tobin and Tippett (2014) offered three different workshops that allowed for teachers to learn how to differentiate, implement what they learned, and then review and revise, making changes so that they could successfully use the strategies more in their classes. In the first workshop they offered teachers different lesson plans they could use, as well as demonstrated how the lesson could be differentiated. A key focus in this professional development session was that ideas were not fixed and could change, thus offering several lessons gave teachers options, while also demonstrating what differentiated instruction was (Tomlinson, 2014). After the teachers had time to implement the lessons, they could come back together to collaborate with others on how they did, get advice on what changes could be made, and discuss their fears and insecurities. Tobin and Tippett (2014) reported that school administrators asked their staff do a "donut share" where the teachers made two circles, one inside the other, and faced the person standing across from them in the other circle. The teachers were given an allotted amount of time to share what strategies they had been using and how they felt their differentiated lessons were going. After the time allowed was concluded, the outside circle would rotate; the cycle repeated until the teachers were back with their original partner. This activity allowed the teachers to reflect on what they were doing compared to others, what changes they could make, and what was working. The times of sharing helped educators determine the next steps they should take to better differentiate their lessons, (Tobin & Tippett, 2014).

## How Teachers Are Differentiating

While differentiated instruction can be implemented in various ways, there are certain attributes that must be included for curriculum to be of value. Instruction should be organized around clear goals, content and assessments must align with the goals, learning experiences need to engage students, and learning experiences should be authentic (Tomlinson, 2014). Revealed in the literature was that some teachers implementing differentiated instruction in their classrooms were incorporating some of the qualities Tomlinson believed were needed to have quality curriculum (Lang, 2019; Shareefa, 2021). Also uncovered in the literature were various themes for how teachers were implementing differentiated instruction: lessons had clear goals and expectations; lessons were aligned with assessments; lessons provided active learning experiences; group work was encouraged throughout the units of study (Godor, 2021; Haymon & Wilson, 2020; Laballo et al.,2021). Some educators may feel preset lessons and materials

are the best way to cover standards, allowing them to cover the content requirements to reach all students in the classroom. While measures can help lessons stay coherent and prepare students for assessments at the end of the unit, or school year, it is desirable that instruction, whether pre-designed or developed by the teacher, be relevant and engaging.

# Experiences

#### Goals and Objectives

An important part of differentiated instruction is having clear goals for the school year, each unit, and each lesson. The purpose of the goals, according to Tomlinson (2014), is to have something to strive for and measure personal growth. Key learning goals also help ensure learning for all students and teachers understanding of their students' trajectory through units and the year (Tomlinson, 2014). In identifying personal growth, students need to set their own goals, in addition to those set by the teacher. When goals are clearly defined students know the purpose of the lesson or activity and the teacher's expectations. With clear goals, students can begin to focus on reaching the outcome (Sousa & Tomlinson, 2011). Based on the current literature, starting the lesson by stating a clear purpose and learning goals is important for implementing differentiated instruction.

Crafting and verbalizing goals helps teachers and students understand the purpose of the current activity and give the work more meaning. In a recent study, Kloss (2018) studied two different schools implementing differentiated instruction and found educators explained the plan and set clear and precise goals for each lesson. Other teachers presented goals more than once and reestablished the objectives throughout the lessons (Siam & Al-Natour, 2016). Clear instruction and guidelines helped teachers design and implement differentiated instruction, and made the content, process, and product more meaningful because both the students and teachers were aware of the importance of learning materials and activities (Netoch & Bishop, 2017). Sharing the goals and purpose of the lesson helped students navigate their growth while also giving meaning to their effort other than just working to complete a standard.

### Learning Experiences

Curriculum is usually based on students accruing facts and skills that can be retained and recalled for a test; however, the content may not have meaningful material (Tomlinson, 2014). The experiences that were offered in the current literature are harmonious with differentiated instruction and helped students connect to what they were learning in different ways, making it easier to apply to other circumstances (Ginja & Chen, 2020; Netoch & Bishop, 2017; Siam & Al-Natour, 2016). Some teachers supplement the content with videos, comics, pictures, or opportunities to speak with others who have previous or current experience with the material (Stavrou & Koutselini, 2016). When students have more options, they are able to pick the one approach that suits their intellectual strengths or interests. This allows teachers to better reach their students who are then able to understand the content more (Goddard et al., 2015). The use of projects is another way teachers differentiate their instruction. Herner-Patnode and Hea-Jin (2021) found that their participants were differentiating lessons for their students based on student interests. One institution had their students make meaning through collaborations and encouraged students to share their experiences with the topic, if they

had any, so that others could learn from their peers, versus learning the material from a textbook (Parsons, et al., 2013). Recognizing that individuals learn from each other is important, and something that differentiated instruction encourages, for everyone makes meaning differently. Having multiple options for students to interact with the topic helps the teachers when designing curriculum and makes it easier to create some type of experience for each lesson.

Differentiated instruction can offer meaningful instruction and experiences for all students. To be sure lessons were meaningful, some teachers asked themselves certain questions before designing their instruction and assessments. Teachers can ask themselves various questions to help them differentiate in each subject: (a) what do students actually need to know, understand, and be able to do after the lesson; (b) what is the students' current knowledge, understanding, and skills for the topic; (c) how can classroom time be made available for students to move forward in their knowledge from their varied starting points; (d) how can content be linked to things students' are interested in; (e) how can routines be established in the classroom schedule that allow for predictability and flexibility (Tomlinson, 2014)? While these may be common questions teachers can ask, the answers are different for each educator and each class. Researchers agreed that the differentiated instruction can occur in various ways including the use of multimedia, guest speakers, displays, demonstrations, projects, web-based supplemental materials, different versions of the same text, and more (Godor, 2021; Kloss, 2018; Pozas et al., 2020; Siam & Al-Natour, 2016; Stavrou & Koutselini, 2016; Tzanni, 2018). Offering differentiated options with each lesson gave students a chance to learn the

material at their level. Rather than altering a part of each lesson, some teachers offered a variety of involvements in each lesson, such as learning stations and workshops (Godor, 2021).

Current research brings to light the multitude of activities teachers use in differentiation to help students process new information. Teachers who implemented differentiation used activities to help students process the material. The use of activities helped stimulate creative and critical thinking skills and independence, which made it easier for students to process material (Pozas et al., 2020). Through the use of a case study, Kloss (2018) discovered educators differentiating instruction through the creation of games. While the school had a collection of games for the students to choose from when learning, the teachers encouraged students at different stations to develop their own games relevant to the content. The activity allowed learners to demonstrate knowledge and comprehension, engage in creative thinking, and teach other students. In another study, Chien (2015) discovered teachers created learning stations where students could rotate through different activities and apply prior knowledge to what they were currently learning based on their understanding. Creating activities was an effective way for students to learn the same material but at their individual level.

Jackson and Evans (2017), Kloss (2018), Pilten (2016), and Tomlinson (2001) believed sharing experiences with peers was a supportive way in which teachers could differentiate their instruction. Teachers highly valued students' experiences and encouraged them to share, believing collaborative dialogue was a more meaningful way to learn than any text (Kloss, 2018; Parsons, et al., 2013). Through this time of sharing, teachers were also able to determine what the students already knew and create lessons from their previous knowledge. Teachers also determined students' prior knowledge by conducting mini projects before as a lead-in to the topic. KWL charts, brainstorming sessions, and surveys with open ended questions were other methods that teachers used to assess students' prior knowledge (Altintas & Özdemir, 2015).

How teachers were differentiating the product of the lesson was revealed in the literature. The purpose of the product, according to Tomlinson (2001), is to show understanding of the material and knowledge can be applied to other contexts. Like differentiation of the content and process, there is no perfect way to differentiate the process. Sousa and Tomlinson (2011) believed the product should include options for students to choose from based on what worked best and was most meaningful for the students themselves. Giving different options for the same material allows for a diversity of approaches to lessons without compromising the goal of the lesson and allows teachers to meet the curriculum standards. Kloss (2018) found when students had a freedom of choice for their product students showed more growth and knowledge in the lesson.

There are various ways teachers can alter the product; however, a common differentiating strategy found in the literature was the use of projects. Teachers worked with students to develop and execute a project. Kloss (2018) and Netcoh and Bishop (2017) allowed students to decide on a project focus, in what ways the project would be completed, and how to demonstrate what was learned. To stimulate students' ideas for projects, teachers provided previous projects as a guide. In some instances where students helped design their projects, teachers allowed students to create grading scales and rubrics (Pilten, 2016). Teachers guided students to identify the skills that were used and learned in the project (Pilten). To maintain some structure and move the projects forward, teachers did impose deadlines for students to meet. Sousa and Tomlinson (2011) advised that along with deadlines, teachers should also incorporate check-ins with students to monitor progress. Check-ins were valuable in helping teachers assess students' knowledge of the material and make any needed adjustments.

## Assessments

Differentiated instruction is rooted in assessments; therefore, it is important that assessments are embedded throughout a unit of study, not just the end (Tomlinson, 2014). Assessments can occur before the unit starts and then continue throughout the unit allowing teachers to chart progress, measure students' knowledge, and adjust instruction. Preassessments can determine students' readiness, prior knowledge, and skills with the content (Tomlinson, 2014). Preassessments can act as a gauge for teachers to evaluate students' knowledge and progress through the unit. Disclosed in the literature was how teachers used preassessments to learn about each student, their prior knowledge about the lesson content, and to determine necessary content adjustments (Coubergs et al., 2017; Jackson & Evans, 2017). Pre-assessment results can help teachers identify students' weaknesses and strengths, enabling a more targeted differentiation and challenging material. Chien (2015) reported teachers used the results of pre-assessments to determine if the academic level of content to give each student. For students advanced in the material, Chien discovered teachers gave more supplemental material to support more challenging content.

Assessments can be conducted in numerous ways to allow for students' academic abilities to standout. Some teachers used assessments to see which goals students had met, and to gain insight into the way students were processing the material (Coubergs et al., 2017). Those in Tzanni's (2018) study altered the product of the lesson and unit by using different types of evaluations, including tests, assignments, activities, and presentations. Activities and presentations that require more creativity than other assessments should be offered for those students who can best express themselves creatively (Sousa & Tomlinson, 2011). Teachers accomplished this by allowing students to write poetry, create songs, give oral presentations, and give a performance, among other activities (Siam & Al-Natour, 2016; Tobin & Tippett, 2014; Tzanni, 2018). Other teachers capitalized on popular media, having students present their project in a 'talk show' format, write a newspaper article, craft a public service announcement, develop an advice column, or compose a letter to an elected official (Taylor, 2015). Stavrou and Koutselini (2016) observed the value in allowing students creative freedom by assigning mock newspaper or magazine articles to demonstrate what they had learned in the unit.

Other teachers gave students prompts and parameters for assessing, then allowed the students to choose how they would demonstrate knowledge of the material. Teachers in Coubergs et al. (2017) study allowed students to choose whether to answer assessment questions orally or written. Students were able to answer the test questions to the best of their ability when given the choice of how to approach the assessment. Teachers also offered students the ability to be assessed individually or as a group (Siam & Al-Natour, 2016). Teachers in Tobin and Tippett's (2014) study permitted students struggling with writing to draw pictures of what they knew and wanted to say, and then write a description of the picture, as a response to test questions. Giving students options for how to demonstrate knowledge allowed them to choose assessments that fit their abilities and learning styles.

## **Group Work**

Group work was another common strategy the teachers in the literature employed to differentiate instruction. Teachers used various methods to group students beyond just their learning ability; they used students' background, interest, and prior knowledge (Civitillo et al., 2016; Gibbs & Beamish, 2021; Godor, 2021; Pozas et al., 2020). Students can also be grouped by their readiness and learning profiles (Tomlinson, 2005). Grouping students can be flexible and range in size and ability (Gibbs & Beamish, 2021). No matter how teachers chose to group their students, differentiating the lesson to fit the needs of the groups is important. Godor (2021) discovered flexible grouping allowed teachers to pair students up more based on their level and even grouped students of various levels, which in the end provided more learning for the students.

Groups were used in the classroom for various reasons. Pozas et al. (2020) found group work was a good way for teachers to help students at different levels work together. They did this through heterogenous grouping and homogenous grouping. Group work also allows students to work together and learn from their peers (Tomlinson, 2001). Some teachers grouped students based on their needs and abilities (Jackson & Evans, 2017; Kloss, 2018). Goddard et al. (2015) found that when they grouped students based on their interests or cognitive abilities, students were able to work with peers that maybe they wouldn't have before, and teachers could focus more on specific skills that need further development.

Godor (2021) and Siam and Al-Natour (2016) discovered teachers were using groups to teach different levels of the content, but still focusing on the concept of the unit. Other teachers found various books on the same topic, assigned students to groups based on abilities, assigned the book that was appropriate for the groups level, and then worked one-on-one with each group to be such students were processing the information (Chien, 2015). Teachers also used interactive activities for students to do in groups where students had hands-on experiences with the material, and the chance to learn from each other (Jackson & Evans, 2017). Group work allowed teachers the opportunity to focus more on students instead of the standards that had to be met (Netoch & Bishop, 2017).

# **False Reality of Differentiating**

Teachers have evolved and changed over the last decade and are changing their curriculum to better meet the needs of the students (Tomlinson, 2014). A problem identified in the literature revealed instances where teachers claimed to differentiate but were only altering one minor part of a single lesson or unit. Teachers in Tzanni's (2018) research differentiated instruction in various ways but did not engage in the practice often and were not always willing or enthusiastic to use the approach. Tzanni believed this exposed a belief in differentiated instruction was strong, but the actual implementation of the teaching method was weak. Ginja and Chen (2020) and Whitley et al. (2019) discovered teachers were not implementing differentiated strategies in daily instruction. Ginja and Chen (2020) used questionnaires and interviews to determine the challenges and the successes that teachers had while implementing differentiated instruction. The data Ginja and Chen presented revealed that most teachers were not using differentiated instruction in the classroom for various reasons, although they were aware of its importance. In another study, teachers were using a reactive teaching approach, meaning they fit their students into predesigned lessons, not designing lessons around their students (Civitillo et al., 2016). Implementing differentiated instruction is changing the content, process, and product of lessons, not just one component of a lesson occasionally. Consequently, since differentiated instruction is many things to many people, detecting patterns and themes in the teacher responses will be important to this study to help determine if a teacher's perception and opinion of differentiated instruction are real or false, or if their notion of differentiated instruction is acceptable.

# Conclusion

As the world changes and progresses, so do education and learning institutions. Tomlinson (2001) was concerned that even with new resources and technology, classroom instruction has reformed very little over the past 100 years and is hostage to government standards. Tomlinson's (2014) work shows that classrooms should embrace all the different aspects of students' lives and connect them to the world through curriculum. Differentiation of instruction offers the opportunity for teachers to meet the needs of all students in meaningful ways, rather than in just one method of instruction applied regardless of student ability.

The purpose of this qualitative case study was to explore middle school teachers in a private school in south-central state perceptions of, expectations about, and experiences with, differentiated instruction. A literature search returned results for a great deal of quantitative studies focused on the implementation of differentiated instruction to enhance different student learning styles (Ginja & Chen, 2020; Malacapay, 2019; Moosa & Shareffa, 2019). Also illuminated through the literature review was that teachers report difficulties and challenges in implementing differentiated instruction. However, there is limited research to qualitatively understand how teachers process and align their perceptions of, expectations about, and experiences with, implementing differentiated instruction. According to Yin (2011) there is value in a case study approach that explores real-life situations and preserves contextual conditions that influence the experience. Chapter 3 examines the research method design for this study.

#### Chapter 3: Introduction to the Methodology

The purpose of this qualitative case study was to explore, in a private school in a south-central U.S. state, middle school teachers' perceptions of, expectations about, and experiences with differentiated instruction. Since the goal of a case study was to explore and understand the complexity of the given topic, it was prudent is common to have several forms of data collection to attain the most in-depth understanding of the case (Robert Wood Johnson Foundation, n.d.). Therefore, data were gathered through demographic profiles, initial questionnaires, and follow-up audio-taped semi structured one-on-one interviews. The data provided an understanding of teachers' perceptions of, expectations about, and experiences with the implementation of differentiated instruction. The results of this study helped explain perceptions and the instructional practices of differentiation.

For many years researchers stressed the importance of the middle school years, advising that appropriate instructional practices and support can accelerate student learning, raise attendance rates, and groom middle school students for productive high school and postsecondary experiences (Balfanz, 2009). Differentiated instruction involves multiple instructional concepts and strategies, including active learning, curriculum development, technology integration, and professional development. Teachers' effectiveness in implementing differentiated instruction in the classroom depends on many factors, including perception about the practice, understanding of technique, skill, practice, and confidence (Tomlinson, 2001). The central purpose of the following research questions was to guide the focus of data collection in exploring teacher perspectives and experiences regarding the implementation of differentiated instruction.

RQ1: What are private middle-school teachers' perceptions on the need for differentiated instruction in the classroom?

RQ2: What are the perceptions of private middle-school teachers' with implementing differentiating instruction in their classroom?

RQ3: What value do private middle-school teachers perceive in differentiating their instruction?

RQ4: What strategies do private middle-school teachers identify as best practices for differentiating instruction in the classroom?

This methodology section includes a description of the research design, participants and procedures for recruitment, explanation of the instruments and data collection, and data inquiry. My role with the school and my relationship with the participants are detailed. Last, the ways to ensure validity and reliability were discussed, as well as the ethical procedures used in the research process.

For this study, I used a qualitative case study methodology to explore 5th- through 8th-grade teachers' perceptions, experiences, and expectations of implementing differentiated instruction at a private school in a south-central state. Yin (2011) posited that the value of the case study approach is to explore real-life situations and preserve contextual conditions that influence the experience. Understanding what teachers believe about differentiated instruction and what they experience when implementing the strategy is important for gaining insight into how their perceptions and experiences impact their instructional practice.

## **Research Design and Rational**

A case study helps explore and gain understanding about the given topic and obtain information about the participants' values, perceptions, emotions, behaviors, and social context of the topic (Mack et al., 2005). Although the findings from qualitative research cannot be generalized to other populations or geographical locations, the findings can often extend to others with similar characteristics (Mack et al., 2005). Therefore, a case study is the best approach to this study.

# Justification for Case Study

In this study, I examined teachers' perceptions and conducted an extensive investigation into a phenomenon and the setting in which the phenomenon exists; therefore, a case study approach was appropriate. A case study allowed me to examine teachers' perceptions, experiences, and implementations of differentiated instruction. While I ultimately chose to use a case study approach, I did consider other research designs to determine which method would adequately address my research questions the best.

According to Creswell (2013), there are qualitative designs other than a case study – grounded theory, narrative, ethnographic, and phenomenological – each of which I took into consideration. In a grounded theory approach the researcher looks to generate a theory that is based in the data to explain a process, action, or interaction with a topic (2018). I was not trying to establish a theory; rather I was trying to explore and gain an understanding of how teachers' perceptions of differentiated instruction impact their use of the teaching strategy; therefore, a grounded theory method was not appropriate for this study. Narrative research is simply retelling an individual's story, not exploring a phenomenon (Creswell, 2013). Since I was interested in exploring the experiences of the teachers, a narrative approach would not work. Ethnographic research uses data that is collected from close detailed observations of a culture or group (Yin, 2014). Ethnographic data is primarily collected through field notes, not questionnaires and interviews like I used, which was why this form of research study was not suitable for my research. Phenomenological research was the last form of qualitative research I considered. Phenomenological studies examine the prevalence of a phenomenon and often use surveys and/or archives (Creswell, 2013; Yin, 2014). Since I was examining various components and using different types of instruments, a phenomenological approach was not congruent with the research questions in this study.

## **Role of the Researcher**

The participants for the study come from a private middle school in a large metropolis in a south-central state. While I do not work for the school, I see some of the students that attend the school for private intervention sessions. The students' parents hire me to provide intervention for their child's learning difference. The school provides me a space to meet with the student during the day. Although I am not a colleague, I do have some interaction with the teachers, which provides a foundation of a relationship between the participant and myself. My role as a private learning specialist and not an employee of the school is clear to all the teachers. Additionally, since I do not work for the school, I hold no position of power in the school, nor am I responsible for any form of supervision of any employees in the school.

To manage personal bias, I enlisted the help of the head of the middle school to invite all teachers to participate in the study and then used a stratified sampling method to select the participants. Researcher bias was managed by not judging teachers for the teaching methods they are using. To allay any concerns that school administration would be aware of teachers' responses, I affirmed that participant names and responses would be kept private and confidential. I used teachers from all four grades and core subjects. I did my best to avoid all personal bias or motivations for results. In addition, I did not exploit the results of the questionnaires or interviews to make the responses appear to fit all teachers. Each participant filled out the profile and questionnaire for this study; however, the interview was verbal responses, not written ones. To avoid errors in data collection during the interviews, I recorded the interviews with audio-tape and then referred to them when going over the data so that I could properly record the participants' answers.

# Methodology

In this section, I explain the participant selection logic, instrument used for data collection, and the procedures for recruitment, and participation. Additionally, this section addresses the data analysis plan that followed once data collection was complete. This section concludes with a discussion of issues of trustworthiness related to the study and how those issues were addressed to ensure credibility, transferability, dependability, and confirmability.

According to Creswell (2013) the researcher must attempt to achieve validity in qualitative research by examining the accuracy of the data by researcher(s) and participants. In my attempt to establish validity, I created the interview questions carefully, selected appropriate participants within my target group, eliminated any personal bias when analyzing the data, and analyzed and collected the data continuously. I sent the questions to a group of five people; some were content experts, and some were methodology experts. With the help of a methodology expert, the method was as follows: (a) identified a panel composed of two teachers and the head of the middle school to help develop questions for the questionnaire and interview; (b) reviewed the questions with expert panel; (c) recruited six participants (teachers) for the questionnaire and interview; (d) transcribed interviews; (e) analyzed data to identify common themes and patterns in responses; (f) shared results with participants to verify meaning and intent; and (g) wrote the 'story' of the school's experience with differentiated instruction. There were 24 teachers, grades 5-8, that teach English, history, math, or science. My goal was to achieve a representation of grade level and subject matter taught. Therefore, I determined that recruiting six to ten participants would meet this goal. Six participants responded to my recruitment efforts.

# **Participant Selection**

For participant selection, I focused on middle school classroom teachers employed by a medium sized private school in a south-central state. Since it was not necessary to use data from every teacher in the middle school, only a sample was selected (Mack et al., 2005). Using purposeful sampling, I achieved equal representation of participants from each grade and core subject. Purposeful sampling includes recruiting participants that can provide in-depth information about their perceptions and experience under investigation (Creswell, 2013). For this study, I looked for middle-school teachers in each grade; therefore, purposeful sampling made sense for this study. When using this form of sampling, the participants must meet some criteria that are set by the research (Creswell). Purposeful sampling allowed the selection of only those teachers that met the following criteria: (a) 5th- 8th grade teacher, (b) English, science, history, or math teacher, (c) had knowledge of differentiated instruction, and (d) has had experience with differentiated instruction.

#### Instrumentation

For this study, I used two different instruments with each participant: questionnaire and a one-on-one interview; both instruments were reviewed by the expert group before they were administered to the participants. The purpose of the questionnaire was to explore instructors' understanding of differentiated instruction, their perceptions about differentiated instruction, expectations, and feelings about differentiating, and their experiences in implementing the teaching method. The interview allowed me to gain a deeper understanding of the answers provided on the questionnaire, and ask new questions based on the information gathered in the questionnaire.

Some of the analytical objectives of the profile, questionnaire, and interview are to describe the individuals' experiences and the norms amongst the group (Mack et al., 2005). Structured semi-formal interviews were conducted to clarify and expand the questionnaire information in order to gain further insight into teachers' feelings, use, perceptions, and expectations of differentiated instruction. The interviews were audiotaped, transcribed, coded, and classified into topics to identify patterns and trends. I analyzed the themes found in the questionnaire using text analysis and an interpretation of the larger meaning of the responses (Creswell & Creswell, 2018). The transcripts and preliminary findings were provided to interviewees for their review. The purpose of the interviewee review was to allow participants the chance to provide feedback on accuracy and authentic representation of responses, feelings, perceptions, and perspectives. Seidman (1995) advised that the review is conducted in enough time so as not to lose the connection between points of discussion.

## **Procedures for Recruitment, Participation, and Data Collection**

#### **Procedures for Recruitment**

To recruit participants, I initiated the study by creating an email that explained the study in detail and included a consent form as an attachment to the email. Due to Covid, I sent the email to the head of the school who forwarded it to all the 5-8 English, history, math, and science teachers. In accordance with Mack et al. (2005), I gained informed consent by clearly explaining the study, what was expected of them if they participated, that participation was voluntary, and how their privacy would be respected. I kept records of how and when consent from each participant was achieved. Explaining the study, participants' role, and getting consent helped me establish trust with the participant. After I gained consent, I provided to each participant through email, a schedule that outlined the dates for completing and returning the questionnaire and proposed dates for the

interviews. I gave options for various interview times before and after school that for which the participants could sign up.

# **Participants**

To select the participants who were best suited for the study a stratified sampling method was used. Stratified sampling is a process where the researcher divides the population into subgroups based on common characteristics to then draw the participants from (Given, 2008). To use this method, with the help of the head of the middle school, I divided the teachers by the grade and discipline they taught. I wrote and email that explained the study, consent to participate, and included the link to the survey. The email was sent by the head of the middle school to the 36 teachers that fit the parameters of the study. Six teachers volunteered to be participants in the study. Although there were only six volunteers, a good representation of the grades and disciplines was achieved. I followed the recommendation by researchers to have a representative sample of the population being studied (Creswell & Creswell, 2018).

Participation was voluntary and was not required or mandated by administration. Being in the position of power, the head of the middle school served as the gatekeeper in the study. The purpose the gatekeeper was to help me identify and recruit participants (see Mack et al., 2005), as well as serve as the liaison between the participants and me (see Creswell & Creswell). To do this, I sent her the invitation and participant consent forms via email, which she forwarded to all the 5th– 8th English, history, science, and math teachers. The participant consent form contained the link to the questionnaire. It was also clear in the participant consent form that those who chose to participate in the link were also giving their consent to the study. The six participants that ultimately chose to volunteer for the study represented grades 5-8 and each of the core subjects: English, history, math, and science.

#### Data Collection

I began data collection for this study in May 2021 following approval from the Walden University Institutional Review Board (approval number 04-23-21-0137797). I concluded data collection in July 2021. I collected data on the participants' perceptions, limitations, expectations, and experiences with differentiated instruction through surveys and personal interviews with follow up questions.

During the initial phase of data collection, I emailed a survey to each participant and asked that they return it within the week. All six participants completed the survey. The survey included nine open-ended questions that participants were free to answer in their own words. Open-ended questions can show what is important to the participant and descriptive in nature (Mack et al., 2005). I created the survey and reviewed the questions with my committee to ensure that the questions aligned with my research questions and purpose. When participants completed the survey, an email was sent to alert me of the action. Once I was notified that a participant had finished the survey, I analyzed and recorded the data in a spreadsheet matrix and constructed the questions that led each participant interview. Additionally, I dispatched an email to the participant to schedule the follow up interview. The purpose of the interview was to gather more in-depth information about the individual participant's responses to the survey. Prior to the interviews, I read through the participants' survey responses to determine what questions needed further information. All the participants completed the interviews and answered the questions that were created based on their survey responses., in addition to the number of years they had taught, and the grade level and subject they taught. The interviews were conducted online over Zoom to ensure a safe process that followed the no visitors on campus rules the school had set due to COVID. The average interview lasted 20 minutes. Once the interview was over, I ran the audio through Sonix, an audio to text converter, to transcribe the file.

Following the questionnaire, I scheduled and conducted one-on-one interviews with each participant. Interviews are an ideal way to collect data on participants' history, viewpoints, sensitivities, and involvements to the topic (Mack et al., 2005). Based on the questionnaire, I designed the initial questions to explore and gain more understanding of the teachers' perceptions, experiences, and uses of differentiated instruction. Following guidance from Mack et al. (2005) to respond to participants' answers, I followed up with questions such as 'why' or 'how' to gain further information. To prevent any coercion, I was mindful of my facial expressions and body language through the interview. Furthermore, questions were flexible and altered, when needed, throughout the study, according to what was discovered. Reviewing, recording, and analyzing the interviews gave me insight into the themes and patterns of perceptions, experiences, and uses of differentiated instruction.

#### Data Analysis Plan

To analyze the findings, I started by organizing the data as I received it. I printed the survey responses as they were completed and submitted. I then read through the data, several times, and took notes on my initial findings. After reading through the responses and taking notes, I entered the information into NVIVO. I read through the findings again, and as I did, I used the color-coding system to identify codes. I used the codes to come up with categories that were representative of the data. I then used those categories and identified themes that had emerged. After the interviews were complete, I printed them out, uploaded them to SONIX, and proceeded to follow the same steps for the interviews that I did for the surveys to discover any new themes in the data.

#### **Issues of Trustworthiness**

# Credibility

I suspended my own assumptions, judgments, and perceptions to objectively review the data. It was important to avoid any remarks that may be interpreted as coercive or make it appear as though participation was not voluntary or responses were not to my liking (Mack et al., 2005). I shared the findings from the data with the participants to attain ethical justice (Mack et al., 2005). While sharing, I remembered that the vulnerability and confidentiality of each participant was protected (see Yin, 2011). To do this, I did not repeat any comments or personal information from one participant to another, no matter how trivial the information appeared to me.

# Transferability

For this study to be reliable, it should be transferable to another study and applied to a larger audience. Joppe defined the reliability of a study as:

the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (2014, p. 1).

This study explains how the data was gathered, analyzed, themes were developed, and results were achieved, which would aid another researcher in the replication of this study and its reliability.

# Triangulation

To obtain internal validity and enrich trustworthiness and creditability I used triangulation during data collection. A triangulation approach will facilitate validation of the data through cross verification of more than one source (Yin, 2014). To help maintain an inductive analysis of the data I had one-on-one debriefing sessions with participants to go over their answers to ensure that I recorded and understood them correctly. During this time, I continued an ongoing analysis of the data until interview five and six, when saturation occurred. Lastly, recurring statements and relationships among interviewee statements and experiences were noted, given specific codes, and eventually sorted into categories. This careful process elucidated the identification of themes. In accordance with Seidman's (1995) advice that data analysis is inductive rather than deductive, I accepted findings and reported themes and patterns as they emerged.

# **Dependability and Confirmability**

Researchers have an obligation to confirm the data findings as they are so that experiences and perceptions of the participants are dependable and represented accurately (Creswell & Creswell). To confirm the dependability of study, an audit trail that detailed each step of the research process from the initial development of the study to the findings. Triangulation was also used by gathering multiple types of data (survey and interview). It is important to use these methods to maintain validity throughout the study (Creswell & Creswell, 2018). To establish confirmability, I took notes after each survey was read, and after each interview, where I recorded any personal assumptions or bias, and how I prevented them from influencing my interpretations of the data.

# Conclusion

While there are many studies that support the implementation of differentiated instruction to enhance different student learning styles (Gibbs & Beamish, 2021; Ginja & Chen, 2020; Olicia, 2016; Whitley et al., 2019), there is limited research that seeks to explore and understand how teachers process and align their perceptions about, and experiences with, implementing differentiated instruction. While a large amount of literature is focused on how to differentiate lesson plans and the success that it brings to students who experience this type of instruction, there is a gap in research on teachers' feelings about differentiated instruction, and what their experience is when implementing differentiated instruction in the classroom, particularly in private schools (Bondie et al., 2019; Dixon et al., 2014; Ginja & Chen, 2020). Specifically, there is a lack of research on private middle school teachers' perceptions and experiences with differentiated

instruction. Exploring to develop a deeper understanding of what teachers believe about differentiated instruction, and what they experience when implementing the strategy, is important for gaining insight into how instructional practice is impacted by their perceptions and experiences. Through an exploration of teacher perceptions about, and experiences with implementing differentiated instruction, the study findings will help illuminate the reality of instructional practice.

For this research study, a case study approach was used to explore teachers' perceptions, expectations, and experiences for differentiated instruction. Participants from a private middle school in south-central state took part in various instruments for data collection: a demographic profile, questionnaire, and interview. Validity and trustworthiness were taken into consideration throughout the duration of the study. I was consistent in recording and analyzing my findings until a saturation of data occurred. Different themes arose from the research findings and will be explained in detail in Chapter 4.

#### Chapter 4: Results

The findings of this qualitative case study on private school faculty perceptions about differentiated instruction are presented in this chapter. The study addressed four research questions focused on the teachers' perceptions of the need for differentiated instruction, implementation, instructional experiences, and best practices. The research questions were developed based on the theoretical framework of differentiated instruction developed by Tomlinson (Tomlinson, 2014). The research questions were:

RQ1: What are private middle-school teachers' perceptions on the need for differentiated instruction in the classroom?

RQ2: What are the perceptions of private middle-school teachers with implementing differentiating instruction in their classroom?

RQ3: What value do private middle-school teachers perceive in differentiating their instruction?

RQ4: What strategies do private middle-school teachers identify as best practices for differentiating instruction in the classroom?

The setting, demographics, data collection, and data analysis are discussed in Chapter 4. I also address issues of trustworthiness and present the results of the data analysis. A summary of Chapter 4 is offered, along with an introduction to Chapter 5.

# Setting

Due to the COVID 19 pandemic, the setting for this study changed from what was originally expected. As a result of the mandates at the time of data collection, the initial survey was sent to participants through email. To manage personal bias, I asked the school administrator to email the invitation to the teachers' email. The invitation (with a consent and survey link) was sent at the end of April to all 5th-8th grade English, math, science and history teachers at a private middle school in a south-central state. The invitation had a line in the end that read, "If you feel you understand the study and wish to volunteer, please indicate your consent by clicking on the following link and taking the survey...," which gave consent to use the data obtained in the survey and interview. The email included a link to Survey Monkey, where the survey was presented. Following appropriate COVID-19 safety protocols, the interviews were conducted over Zoom. I conducted the interviews from my office in my house, and the participants were each in their homes as well.

#### **Demographics**

Six teachers from the private school in a south-central state completed the survey and participated in an interview. Of those six, two taught English 5th – 8th grade, one taught history 7th<sup>h</sup> – 8th grade, one taught math across 6th -7th grade, and two taught science 5th – 7th grade. Teachers from all four grades and each subject were represented, providing a balanced representation of the middle school. All respondents had been teaching for at least 10 years. 33% of the teachers have at one time taught in the publicschool setting and 66% have only taught in the private school sector. All the participants have familiarity with differentiated instruction and use it in their classroom in some form. The representation of the middle school, core class teachers is presented in Table 1.

# Table 1

Particpant	Subject Taught	Grades Taught	Years Teaching
1	English	7th & 8th	12
2	History	7th & 8th	27
3	English	5th & 6th	11
4	Science	5th& 7th	11
5	Math	6th & 7th	17
6	Science	5th & 6th	14

Demographic Data of Sample

# **Data Collection**

In a qualitative study, data collection is "collecting information through unstructured or semi structured observations and interviews, documents, and visual materials" (Creswell, 2013, p. 189). The data collection followed the procedures described in Chapter 3. Data collection for this study happened during the Spring and Summer of 2021 with the permission of the Walden University's Institutional Review Board (approval number 04-23-21-0137797). Using surveys and personal interviews with follow up questions, I collected a variety of data on the perceptions, limitations, expectations, and experiences with differentiated instruction held by private middleschool teachers.

During the first week of recruiting, three teachers responded to the survey and participated in an interview within a week of their survey response. After sending out another email invitation to recruit more participants, two more teachers responded to the survey. After a lack of participation, the invitation was sent out once more in hopes of gaining more participants. Within a week, the sixth participant completed the survey and interview. The recruitment period and interviews took a total of 7 weeks.

After the surveys were received, participants were contacted through email to schedule their Zoom web conferencing interviews. I conducted each interview in a quiet, secure location over Zoom to maintain the participant's confidentiality and privacy. Additionally, each participant was given their own meeting ID and passcode. Each interview session lasted between 15 and 30 minutes. Prior to the interview I read the results of the participant's survey responses to determine what survey questions I needed clarification on, or more information. Some of the interview questions were predetermined, like the demographic questions, while others were semistructured. If the survey responses from a participant needed more explanation and further understanding, additional interview questions were created for the interview with that particular participant.

I began each interview by reminding the participant that the interview was being recorded, thanking them for partaking in the study, and asking the demographic questions. I then began asking semistructured questions. If my intent was to gain further understanding of the participants response to a survey question, I would read them their response first and then ask them to expand on their reply. If my purpose was not for them to expand on a survey response, I would just ask the new question. Although the interview was recorded for later transcription, I took notes during each interview to capture responses that seemed meaningful. When the interview was completed, I expressed appreciation to the participant again, stopped the recording, and ended the

interview. Immediately following the interview, I saved the audio file to my personal, password- protected computer. The computer requires my personal password for access and is stored in the office of my secure home. After saving the audio file, I then logged into my password protected Sonix account online and uploaded the audio file. A transcription of the interview was produced and saved to the same password protected computer.

#### Variation in Data Collection

I initially asked that anyone interested in taking part in the study complete the survey within a week of receiving the email. In response, two teachers emailed that while they would like to participate, they were too busy with end of the year commitments and could not within the time frame. I responded that they could wait until the summer to complete the survey, extending my initial response time, which changed my data collection timeframe.

#### **Uncommon Situations Encountered**

During the data collection I encountered two unexpected setbacks. The first occurred after the initial invitations were sent. I erred in not appropriately considering that the invitation was sent shortly before the last week of school, which did not allow teachers time to respond. As a result, participants needed more time to partake in the study. The second set back was four weeks into my data collection I realized I only had five participants and needed at least six. I resent the invitation and was able to recruit a sixth teacher, who completed the survey and scheduled an interview. However, the interview was delayed three weeks due to the participant's contraction of the COVID-19 virus. Once the participant had recovered and was able to do the interview, my data collection concluded.

#### **Data Analysis**

Data analysis "involves segmenting and taking apart the data (like peeling back the layers of an onion) as well as putting it back together" (Creswell, 2013, p.195). After the surveys were completed, I printed them out and began to explore the responses and noted questions that needed to be asked in the follow-up interviews. I first read the data in order gain a "general sense of the information and the opportunity to reflect on its overall meaning" (p. 199). In doing this, I was able to gain a general sense of the data responses. The responses were then entered into Nvivo, a qualitative software, to be coded and discover emergent themes. An inductive coding approach derives codes from the data so that the theory and understanding emerges from the raw data itself, not the researcher's assumptions (Creswell). Using this approach, I developed codes that derived the categories and eventual themes.

I used two rounds of coding for the survey responses. The first round of coding I used initial codes, which were not specific codes, rather phrases and first impressions of the data (Saldana, 2008). In the second round I organized the initial codes into categories and finally determined themes. This allowed me to "grasp meaning, and/or build theory" (see Saldana, 2008, p. 8). To ensure validity, I went back through each of the responses on paper and manually coded them, then compared the themes from Nvivo to those done by hand.

After conducting each interview, I transcribed the interview and carefully read through them. The transcriptions were submitted into Nvivo and were analyzed for common themes. I coded the transcription using the codes that were created from the surveys. No new themes emerged from the interviews. This could be explained because the purpose of the interviews was for clarification and to obtain more in-depth information on the responses that were given in the surveys. Similar to my approach in analyzing the survey responses, I read through the transcriptions and hand coded them. I then compared the results from Nivio to the hand codes to ensure validity.

While coding the survey and interviews, I referred to the research questions, literature, and areas of the data that stood out to me. This enabled me to move from codes to categories, and eventually themes. While coding I created a table that I used to create my categories. The table also helped me to discover the themes in the data, as shown in Table 2.

# Table 2

# Example Codes, Categories, and Themes

Example Codes	Catagories	Themes	Meaning of Theme
"Tailor," "Group," "Students' needs," "Adapting teaching," "Instruction of skills and content," "Different ways to access content"	Adpating to Students Tailoring	Student Centered	How the Participants defined differentiated instruction
"Don't need for homework," "Needed for complex skills," "Not needed for easy skills," "Show application," "Needed for all "	Not needed for easy task Needed for complex work	Needed for all	All students can beenefit from differentiated instruction when it is used
"Students in control," "Frustrating when it doesn't work," "Students feel successful and empowered," "Teachers are elated," "Students' confidence builds," "Teachers feel defeated," "Students become more confident"	Student Attitudes Teacher Attitudes	Attitudes increase	Attitudes change when differentiation is used
"Pressure of time," "Content of class can be limiting," "Block scheduling means loss of time," "High expectations"	Time Content Expectations	Limitations	Some limitations make it difficult for participants to differentate their instruction
"Helps students get "ah-ha" moments," " See wheels turning," "Demonstrates mastery," "Express understanding," "Builds applied skills"	Shows Understanding Builds Skills	Understanding and application	Differentiated instruction helps students demonstate their understanding of the content/skill
"More planning time with colleagues," "Challenge to get colleagues to think out of the box," "Learn a lot of colleagues," "Builds relationship with students," "Trust grows," "Connection and impact," "Lasting bonds"	Builds trust Builds relationships	Builds relationships	When differentating instruction, relationships betweens colleagues and teachers and students grows
"Writing prompts that give choices," "Variety of materials," "Videos," "Artifacts," "Laptops," "Written assessment online," "Assessing students verbally," "Choice boards," "Posters," "Comics"	Offers Choices Various materials Assessment options	Variety of Choices	The Participants that use differentated instruction offer choices to their students

Codes

Coding the data was a key process in my assessment. As Saldana (2008) noted, "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). While initially coding I tried to use the participants own wording as much as possible. I conducted the coding in two stages; the first was in the NVivo software and the second was by hand. During the first and second stage of coding, the same codes were used repeatedly. According to Saldana, this is normal because "there are mostly repetitive patterns of action and consistencies in human affairs," and deliberate because "one of the coder's primary goals is to find these repetitive patterns of action and consistencies in human affairs as documented in the data" (p. 5). Looking at the frequency of codes, I was able to determine patterns in the data. Each of the codes signified the participants thoughts, perceptions, use of, and feelings on differentiated instruction.

# Categories

A category is "like a container, or a computational data structure that can hold material unified by a common definition" (Richards & Richards, 1995, p. 82). Following the first two stages of coding, I began my third stage, to group the codes together into categories. I referred to my research questions to aid in this process. After analyzing my codes, I broke them up into final categories: adapting to students, tailoring, not needed for easy tasks, needed for complex, work, student attitudes, teacher attitudes, time, content, expectations, shows understanding, builds skills, builds trust, and builds relationships.

#### **Emergent Themes**

"Emergent themes area basic building block of inductive approaches to qualitative social science research and are derived from the lifeworld of research participants through the process of coding" (Given, 2008, p. 248). To easily identify emergent themes in the data, I created a table that had codes and categories that I could analyze. The information is included in Table 2. The codes and categories discovered throughout the data analysis illuminated the emergent themes. When determining the themes, I also referred to the research questions. After assessing the codes and categories, six themes were identified: (a) Differentiation is needed in the classroom for all students. (b) Attitudes change when differentiation is used. (c) There are limitations that make it difficult to differentiate. (d) Differentiation demonstrates an understanding of skill. (e) The use of differentiate offers choices to their students. After determining the themes, I went back through the data to make sure I did not miss anything during the data analysis. The six themes will be discussed in depth in the results section of this chapter.

#### **Evidence of Trustworthiness**

### Credibility

According to Creswell and Creswell (2018), credibility is the internal validity of a study and achieved with triangulation, member checking, and auditing. Triangulation for

this study was achieved by gathering different types of data (survey and interview), from various participants. Member checking is

a process in which the researcher asks one or more participants in the study to check the accuracy of the account. This check involves taking the findings back to participants and asking them (in writing or in an interview) about the accuracy of the report (Creswell, 2013, p. 259).

During the interview I asked the participants for clarification on any of their survey responses that I did not understand. The purpose was to accurately understand what the participant was trying to say. The transcript of the interview was sent to the teachers to read over for accuracy. Lastly, auditing was done by sending the data to the dissertation committee members to verify and check for any bias and inaccuracies.

# Transferability

It is important that the results of this study can be transferred to another study at any given time and applied to a broader audience. Lincoln and Guba (1985) believed that as a researcher, "it is his or her responsibility to provide the data base that makes transferability judgements possible on the part of potential appliers" (p. 316). To make this conceivable, a comprehensive account of the data collection process should be provided (Lincoln & Guba, 1985). In this study I provide a detailed description of my data collection process, allowing the study to be replicated in the future with a different group of participants.

# Triangulation

Of the teachers at the private middle school who teach English, math, history, or science, six teachers out of twenty-four completed the survey and participated in a follow-up interview. There was a balanced representation of English, math, history, and science, with each participant teaching more than one grade in their subject area in the middle school. All the teachers were veteran teachers, meaning they had been teaching for more than ten years. 50% have taught at the private middle school for over ten years. The remaining 50% had been at the school for at least five years.

For this study I used data triangulation. Since I was studying human phenomena, I choose to collect data through surveys and individual interviews to understand the participants and explore the topic of study in more depth (Oliver-Hoyo & Allen, 2006). By reading over the data multiple times, coding in NVivo, and then hand coding, I could compare the themes that emerged and develop a comprehensive understanding of the research questions. By comparing the results from the survey and interview, the validity of the data was stronger. This method of data collection allowed me to validate the data that was collected from two different methods and expose the themes regards teachers' perceptions about differentiated instruction, teachers' understanding of the expectations of the school administration and parents for differentiation, the teachers' personal expectations for differentiated instruction, and the teachers' experiences with differentiated instruction.

# **Dependability and Confirmability**

Reflexivity was structured throughout this study to maintain trustworthiness. This was accomplished using an audit trail. An audit trial is a detailed description of the steps taken in the research process from the development of the study to the findings (Lincoln & Guba, 1985). To enhance the confirmability of the study, I understood my part as the researcher and my biases. I tried to see and understand from the participants' viewpoint, not my own.

#### **Ethical Procedures**

To uphold ethical procedures Creswell (2013) stated that "a qualitative researcher conveys to participants that they are participating in a study, explains the purpose of the study, and does not engage in deception about the nature of the study" (p. 174). To maintain the trust of the participants, and within the study, various actions were taken throughout the research study. When collecting the responses, teachers' names were not used, rather a number was assigned to each participant during the coding and results. After the surveys and interviews were complete, participants were given their own answers and had the opportunity to correct anything that they believed was not clear and misunderstood.

# Results

This study was guided by four research questions:

(1) What are private middle-school teachers' perceptions on the need for differentiated instruction in the classroom?

(2) What are the perceptions of private middle-school teachers' with implementing differentiating instruction in their classroom?

(3) What value do private middle-school teachers perceive in differentiating their instruction? and

(4) What strategies do private middle-school teachers identify as best practices for differentiating instruction in the classroom?

After analyzing the data from the survey and interviews, six themes emerged: (a) Differentiation is needed in the classroom for all students; (b) Attitudes change when differentiation is used; (c) There are limitations that make it difficult to differentiate. (d) Differentiation demonstrates an understanding of skill; (e) The use of differentiation builds relationships amongst teachers and with their students; and (f) Teachers that differentiate offered choices to their students. In this section I demonstrate the connections between themes and research questions.

# Theme 1: Differentiation is Needed in the Classroom for All Students

While there is research on the use of differentiated instruction in public schools, there is limited information about the practice in private schools (Gibbs & Beamish, 2021; Laballo et al., 2021). Since students learn in individual ways whether they are in public or private school, this study sought to explore what teachers in a private school think about differentiated instruction. The participants in the study agreed that all students benefit from the use of differentiated instruction. Participant 4 commented that within the private school, "we still have a wide range of abilities and developmental abilities as well. So being able to differentiate within a lesson is crucial just because we have students of all ranges and abilities." Participant 3 responded similarly in her interview, "I think we still have a wide range of abilities and developmental abilities as well." Although students are required to take an entrance exam to be accepted into the school, that does not mean that they all learn the same way. "The reality is that some of the kids were tested when they were three and a half years old. Kids change and their developmental levels and everything change. It's not a static thing" (Participant 2). Therefore, differentiated instruction is needed because the learning styles, strengths, and weaknesses most likely have changed since the students were first admitted (Participant 2).

The use of differentiated instruction allows students to use their cognitive strengths to learn new material and show their proficiency, which is why it is an effective instruction method (Sousa & Tomlinson, 2011; Tomlinson, 2000). Participant 6 agreed that differentiated instruction is just as important in the private school setting,

I still think in a private school we need to allow kids to use their own learning style because even gifted students, they might be more gifted in one area over another so they can express themselves better, maybe in a more artistic way, or maybe in a more formal writing way. Giving them the choice really allows us to see how accelerated their understanding is.

The participants appeared to believe that while their students may be gifted in some areas, they still need to be able to express their knowledge in ways that best suit their learning styles. While the participants agreed that differentiated instruction is beneficial and needed, not all believed that the method was always required. Some of the participants felt that differentiation is not needed when giving a quiz or other form of unanticipated pop assignment to simply check if students did their homework. Participant 1 wrote that "a time I don't really differentiate, or see the need, is on short reading quizzes that are designed to let me know if a student has done their homework." Participant 3 did not see differentiation as non-beneficial when checking for the completion of homework, but rather, "when we are not teaching a hard skill but rather discussing opinions." Interestingly, both participants 1 and 3 believed differentiated instruction was not always constructive were English teachers. A thorough evaluation of the data exposed that while differentiated instruction may not always be useful, participants felt that more often than not, differentiation was beneficial in the classroom.

For some participants, when the material is more complex, they use differentiated instruction to help students learn the material in the way that best fits their learning style. Participant 3, an English teacher, said grammar was a great example of when her students need differentiated instruction and added:

Some kids pick up the parts of speech very quickly and need more challenge. Other students need to use color coding or memorizations techniques or repetition to understand and identify the parts of speech. I know that eventually all my students can understand the parts of speech if we figure out the best way for them to understand. The key is finding what works for each student and then allowing them to use that method. Participant 5, a science teacher, also uses differentiation for new, complex material, especially in life science when learning new vocabulary, "Since the words are new and more complex than other vocabulary they may have learned before, differentiating the content is important to ensure the students understand the material." Rather than making each student learn a new concept the same way, giving options in how they attain the content allows them to use their strengths to learn the material (Tomlinson, 2001). Differentiated instruction is a method that based on the data, is needed for all learners, and can help change the attitudes of the teachers and students when it is used.

#### Theme 2: Attitudes Change When Differentiation is Used

After analyzing the data, it appears that for these participants differentiated instruction can be rewarding for the teachers and participants. When it works, differentiation is a "joyful experience for both student and teacher" (Participant 4). For the participants, differentiated instruction takes time and effort. Therefore, when it does work, participants feel elated and like their instruction was effective (Participants 3 & 5). One participant even added that when they use differentiated instruction, they feel less constrained to teach a certain way and like they are moving in the right direction, towards student understanding, and allowing the students to use their strengths (Participant 1). Seeing hard work pay off and knowing that what they did to change things up in the lesson helps students, makes teachers happy to use differentiated instruction (Participants 3 & 5). In addition to feeling a sense of success, the participants disclosed that students' attitudes improved with differentiation as well; their confidence, engagement, pride, and independence all improved.

While differentiated instruction brought satisfaction to the participants and made them feel good about their instruction, the data revealed that they also saw value in the confidence it brought out in their students. Differentiation focuses on the individual student, not the class as a whole. Therefore, students feel more positive when they are using differentiated instruction because they are being recognized as an individual (Participant 1). When students are seen as an individual and given the chance to learn based on their learning style, they start to feel confident that they can understand more (Participant 3). For this reason, when participants use differentiated instruction, they have observed their students' confidence in themselves as a learner grow (Participants 3 &5). As Participant 1 said, "Students feel more successful and empowered when I use differentiated instruction." Tomlinson's work revealed that students are more involved in their learning process when allowed to use their strengths (2001). As the confidence in the students grows, Participant 6 finds that "Students become more confident and are more excited about sharing their knowledge." For the participants, seeing their students believe in themselves and knowing they can achieve more makes differentiation a valuable tool in the classroom. In addition to student confidence, the participants also found that differentiation brings more student engagement.

When participants use differentiation in their classroom, students are able to engage more with the material, which in turn leads to better understanding. Differentiated instruction is designed to be learner focused, to give each student the opportunity to engage with the material and obtain knowledge in the way that best suits them (Tomlinson, 2000). Consequently, Participant 1 finds that "Students are more engaged when they are able to capitalize on their individuality as a learner." This could be because they are able to use their learning strengths, making it more fun and less frustrating or confusing (Participant 5). Additionally, participants noticed that when differentiation is used, students are not only more engaged, but they are also able to see their ability and start to take pride in their learning.

Based on the data, when participants use differentiated instruction, students' confidence and engagement grow and their pride in their work does too. Usually in a classroom that uses differentiated instruction, students work is different, based on their learning styles (Tomlinson & Moon, 2013). As a result, students are more connected with what is going on and are proud of their work (Participant 6). Moreover, "When the instruction is effective, there is so much pride in the student. It is very satisfying as a teacher" (Participant 3). The pride students feel in their own work not only impacts them, but also makes the teacher feel good about the learning that is transpiring in the classroom (Tomlinson & Imbeau, 2010). Participants expressed that when students have pride in what they are doing, they start to see that they can successfully become independent as a learner.

Independent learners are just one of the benefits that differentiation can bring to the classroom (Tomlinson, 2014). When lessons are differentiated, according to Participant 2, students "learn to play to their strengths. They can intercede to do some things for themselves that are going to make tasks easier." In doing things for themselves, students grow their independence as a learner aside from their teacher and can gain further knowledge on their own (Participant 5). Participant 1 also finds that when they use differentiation, "Students feel in control of their own learning and grow in awareness of their strengths." This is because differentiation gives students the opportunity to learn in a variety of ways, so they can find what works best for them and apply it to future assignments (Tomlinson & Moon, 2013).

While the participants see the value in differentiation, that does not mean that differentiated instruction is always a positive experience. When some of the participants differentiate their instruction and it does not go as planned, they feel discouraged. Participant 4 voiced that, "I feel frustrated and annoyed with myself that I wasted precious time." Understandably, differentiating lessons, content, and assessments takes time in order to reach each student, so when it does not work, teachers may feel that they have wasted their time altering their lessons. Participant 3 also felt defeated when using differentiated instruction methods and the students still do not get the lesson. When this happens, and differentiation does not work, the students not only do not understand the material, but their work is "lack-luster and sloppy" (Participant 6). While differentiated instruction can be hard on the teachers at times, the benefits for both them and the students are what keep these teachers trying and differentiating their instruction, when possible, even those that get frustrated when it does not work the way they want (Tomlinson & Imbeau, 2010). Although there is value in differentiated instruction based on the data, there are limitations that prevent the participants from being able to differentiate as often as they may like.

#### Theme 3: There Are Limitations That Make It Difficult to Differentiate

Although the data indicates that the participants want to differentiate as much as they can, it is not always easy for teachers due to limitations that stand in the way like parent expectations and time. While content was not a limitation for all the participants, the participants that teach Science believed it prevented them from differentiating. According to Participant 5, "I think the content of the class can greatly limit the differentiation. In science, explaining the water cycle is easily differentiated, but more abstract topics can create challenges for multiple ways to access information." When content becomes abstract, teachers can become limited on the resources they can find to teach the content. As a result, it can be hard to offer various ways to learn the material. When the content becomes more complex, it can be difficult to teach and move forward if the students do not have a solid foundation of the material (Participant 6). No matter how much the participant wants to differentiate their instruction, if the content is too complex and they struggle to access new and various materials, then differentiating will become difficult. In addition to content, expectations are also a limitation for the participants that prevents them from differentiating instruction.

Another limitation found in the data that prevents the participants from differentiating is expectations from the parents and administration. The data revealed that while each participant experienced unique expectations, all felt that these pressures made it difficult to differentiate their instruction. One participant found the administration limited their chances to differentiate. Participants shared that administration expects the teachers to help the individual students learn and obtain knowledge, but do not always give the teacher full information about the child Participant 3 expressed:

Sometimes information about a child's learning style or learning profile isn't disclosed to us, unfortunately. Sometimes you could differentiate if you had more background knowledge. I mean, I'm thinking about some students that I have where I was told they have a reading disorder. But really, if you go back and actually get to look at the test results, it came back as dyslexia. So, I think a lot of times that that kind of information helps differentiate. When there's a lack of it that can impede differentiation.

Without the full profile of a student, it is hard at times for teachers to know what a student needs, especially when they have fifteen to twenty other students in the classroom; therefore, without the student's learning profile it is hard to adjust to fit the student's needs (Tomlinson, 2014). Disclosing all the student's information can aid teachers in how to differentiate the content and assessments in a way that best suits the student's learning profile (Participant 3). Without this information participants found it hard to properly differentiate for their students. However, even if they were given a full learning profile of each student, one participant still believed that is not enough, and the expectation of high grades still existed from the administration.

The expectation that all students will make good grades makes differentiation challenging for some (Participants 1 & 2). Participant 2 felt the expectation for their students to meet a certain grade, which limited her ability to differentiate. Additionally,

the expectation kept Participant 2 and their colleagues in a traditional educational system that is grade based, not growth based. Participant 2 commented that,

I think that it creates problems for people because the traditional educational

system, I think, has been so uniformed, so structured. It has to look like this, and

we grade everyone on the same scale. I think this prevents deeper differentiation. Although grades can make it easier to track progress, they can cause issues according to Participant 1, who said that grades make it "easier to measure student progress across a grade level or class, but it can make both students and teachers feel constrained and less confident that they are moving forward in a positive direction." Grades on test or quizzes measure progress but do always show long term knowledge or future application skills. In addition to feeling expectations from the administration, participants also felt that the parents of their students have high expectations of them that made it difficult to differentiate their instruction.

According to the data, parents of students add pressure to the participants that sometimes limited their ability to differentiate. Although they do not control the teachers and how they teach, they are sending their children to a private school and are paying for the education; therefore, some participants feel the pressure for students to bring home certain grades (Participants 1, 2, & 5). Participant 2 recalled in the interview a time when some parents were upset with a grade and wanted to know the class average and how their child compared. Rather than caring about the growth of the child, they were concerned with the letter grade and where the child stood in the class. When differentiating, each student is seen as individual and not compared with the class. Participants 1 and 5 recalled similar experiences where the parents were concerned about the grade and class rank, not the growth over the semester. According to the participants, this can be hard when parents are demanding grades because they fear that their child will not be in the top of the class (Participants 1, 2 & 5). While expectations from parents limited some participants, time was a factor that limited all the participants.

Another limitation that kept teachers from differentiating instruction was the lack of time. Time is something that is needed to plan lessons and assessment, but without it, teachers can be limited in their ability to differentiate their instruction (Tomlinson, 2000; 2001). Based on the data, time seemed to be the biggest limitation standing in the way of the participants differentiating their instruction. For Participant 1, "There are few limitations, other than the pressure of time." The school in this study went to block scheduling two years ago, meaning the classes met every other day for eighty-five minutes. While some may have thought this was a good change and gave teachers longer to meet with students in a single class period, Participant 1 wished the classes met every day because,

The block schedule and its resulting loss of instructional time has made it much harder to include projects which feature differentiated learning. We are under so much pressure to teach skills and concepts within the time that we do have. Most of the extension projects have been shortened or eliminated as we figure out how to teach in a block schedule.

As a result of block scheduling, participants did not see students every day and had less time weekly with them. Time is limited, especially since the participants do not see the students daily; therefore, when they were together the time was extremely valuable and when not used properly, differentiation is difficult. Participant 3 believed that the time that is allotted is not being used wisely:

The school needs to do a deep look into what are the goals. What are they? What are they like? What are the outcomes we want and that should be what we are able to dedicate time to, not other things that aren't as important?

While the participant did not go into detail about what things take up time that are deemed less important, Participant 1 gave insight into why there was a lack of time for differentiation. Participant 1 felt that one of the things that prevents the teachers from having enough time to plan for differentiation is all the jobs that they deem to be "supervisory, or what some teachers call, babysitting," which include "watching the kids when they have any free time, lunch duties, carpool duties, things like that." While these things are needed and necessary in the day, it is time that the teachers could spend differentiating, not watching students (Participant 1).

To differentiate instruction, teachers communicated that they needed time to learn about their students' needs, find the resources to adjust the content, and prepare for and teach the class. For Participant 5, time hindered their ability to get to, or use, the resources that were available, or search for new ones. Since the participant was rushed for time, they did not know how to quickly find sources because they claimed they were "not great at that." (Participant 5). With the time to look for the right resources, to ask for help, and plan, teachers may be able to differentiate more than they currently were. Participant 6 responded similarly when asked about limitations and said, "Time factors are mostly limited in preparation for the classroom." The same teacher added that, "Many time factors relate to students who have little executive functioning skills, which make directions take addition time." (Participant 6). If the teachers had more time to prepare before class, not only would they possibly have more resources to use that fit the range of students in the class, but they might not have to take time for things like directions because they could find other ways to guide students through expectations, other than one-on-one, that need it (Participant 5). For the participants at this school, it is not a lack of desire that keeps them from differentiating instruction, rather, there were limitations that stand in the way.

#### Theme 4: Differentiation Demonstrates an Understanding of Skill

Another theme that emerged about the teachers' perceptions on differentiated instruction was that it was needed to demonstrate understanding of a skill. Participant 4 said, "If I don't use differentiated instruction then my students don't have the "ah-ha" moments." By using differentiation, the participant can tell just by looking at the students if the content is setting in or if they need to approach the topic differently. When the content does set in, "differentiated instruction becomes necessary as students demonstrate mastery of the basics at various points in the corresponding activities" (Participant 5). These checkpoints are a way to know if the teacher should continue with the content or needed to revisit something. By differentiating, each student is given the opportunity to show their understanding of the material along the way, not just at the end of a unit with a big assessment (Tomlinson & Moon, 2013).

In addition to showing an understanding of the material, students are also able to see their lack of understanding when the participants differentiate. Participant 5 mentioned that when using differentiated instruction, she noticed that students understand the material more, so much so that they know when they are struggling. Participant 5 said students can self-identify errors and say, "I see why I got that wrong." Although they may make mistakes in the process, if students can recognize they have made a mistake, and know what it is, then they must have a certain level of understanding (Tomlinson, 2001).

# Theme 5: The Use of Differentiation Builds Relationships Amongst Teachers and With Their Students

Based on the findings in the data, relationships between colleagues are impacted using differentiated instruction in the classroom. When the participants work together to discuss how they personally are differentiating and share ideas, they grow through collaboration (Hartwig & Schwabe, 2018; Participants 1, 3, and 4). Through this collaboration time, "the better and more differentiated our lessons become" (Participant 1). Participant 4 said that differentiation improves the relationships with their colleagues because they discuss the students and how best to help them. This makes the care of the student more like a team approach verses an individual teacher effort. When collaborating and working as a team, teachers learn from each other, gaining new ideas and further respect for their peers (Participant 3). By discussing strategies and useful, or useless, techniques of differentiated instruction with their colleagues, the data results indicate that participants are spending more time together and building stronger relationships.

At times, those participants that do differentiate get frustrated with their peers that make little effort to tailor their instruction to the students' needs. Participant 2 said, "It can be challenging to get colleagues to think outside the box and move away from some 'traditional' practices." When asked in the interview to expand on what was meant by 'traditional' practices, the participant discussed that some teachers feel liberated by the idea of getting away from grades being what is important and measure students' growth, while others feel less comfortable with it and stick to what they have always known rather than stepping out and trying something new (Participant 2). Participant 6 expressed frustration with getting colleagues to think outside of the box for the students and said that "It can be challenging to get some colleagues on board with allowing for more differentiation especially if they are more confident in expressing themselves in one particular way." For those that are trying to differentiate their instruction for the betterment of the students, it can be hard to sit back and watch their coworkers refuse to change.

The data also indicates that the use of differentiation improves teachers' relationships with their students. By differentiating, trust and connections were formed according to four of the six participants. Participant 1 said that they "think acknowledging and providing opportunities for students to tap into their strengths can build powerful relationships." Participant 3 also thinks that using differentiated instruction deepens the trust and builds relationships. Differentiation means tailoring

lessons, content, and assessments to meet the needs of the students (Tomlinson, 2001). For teachers do this they must be invested in their students and know their needs. That knowledge comes with time and one on one interaction with students, which is what forms bonds and trust. That effort is exactly why Participant 4 believed differentiation helps form bonds between teacher and student; "I think the trust between student and teacher grows immensely when the teachers put in the effort to teach in an authentic and approachable way." When students feel like the teacher is invested in their future and learning, they "will remember projects that are proud of and in particular that will help form longer lasting bonds with them" (Participant 6). While relationships are formed and strengthened between students and their teachers when their classes are differentiated, that is not the only value the participants found differentiation offers to students.

# Theme 6: Those That Differentiate Offer Choices to Their Students

Based on the data, all six participants were differentiating on some level in their classrooms and identified what they believed were best practices for differentiating and aligning with Research Question 4. While some were using similar approaches, they also had their own unique approaches that they felt best suited their students and subjects. One way that the participants were differentiating instruction was by giving students choices with how they approach and complete assignments. All Participants gave their students choices that they felt were best practices, in hopes that the students will be able to pick the one that is most enjoyable and fits their learning style. Participant 1 offered choices in writing prompts and "spends a good amount of effort designing prompts that [they] think will appeal to a wide range of learners." When asked to expand on how they do this more

in the interview, the participant added that some of the questions may be straight forward while others are more open ended and leave it to the student and their understanding to decide how to approach the prompt. They also allowed the students to make up their own prompt to write on, as long as they have the participant's permission (Participant 1). This was best in Participant 1's opinion over other ideas because students were making choices that best fit their ability. Participant 3 found that teaching students color coding, memorization techniques, and ideas for repetition of the material was the best way to help students understand new material like vocabulary. This participant also took the time to help the students identify what techniques were best for them. When assigning vocabulary, both Participant 5 and Participant 6 allowed students to choose from various ways to record and learn the words and definitions. They both allowed for traditional method of writing the word and definition down, allow for online applications like Quizlet to be used, for the students to draw pictures, or write it out in a song or poem.

In addition to choices, some participants also believed a best practice for differentiated instruction was to offer a variety of materials from which students could choose. Participant 2 offers various types of material about the same topic:

Within a given topic, choice can be provided with different types of resources. For example, when exploring early civilizations, the students had a variety of written materials (some shorter some longer) as well videos, and artifacts to explore to help build an understanding about the civilizations.

Although the participant offered various options, the content and topic did not change, which allowed students to choose what worked best for them individually. Participant 5 gave articles, comic strips, videos, textbook pages, posters, and their own notes as options for students when learning a new topic. Participant 4 offered stations for their students to circulate through, in addition to the option of doing work alone, with a partner, or with a small group. This was the best option according to Participant 4 with regards to projects, because students got to work within their own preferences. Knowing some students learn better alone, while others in a group, Participant 4 was giving the students the choice to do whatever fit them best. When teachers differentiate their lessons with choices, students not only learn, but take responsibility for their learning and their success (Tomlinson, 2014).

The remaining way that participants were using their best practices of differentiating, based on the data, was in their assessments. While Participant 1 found it hard to differentiate assessments without making them watered down for some students and difficult for others, and Participant 2 found it difficult to differentiate assessments and still accurately assess students' concrete and analytical understanding. Other participants, however, found ways to differentiate the assessments in their classroom. Participant 4 allowed students to take their assessments on paper or on their computer and used focus tools during the test. Participant 4 "assesses some students verbally instead of having them read and write everything." By doing this, the teacher could determine the student's understanding of the material because the student did not have to be concerned with getting their thoughts on paper or not fully understanding how something is written. Participant 5 also allowed students to, at times, choose the way they were assessed on a concept, giving them the ability to show their mastery in a way that best suited their learning profile. Participant 6 varied the assessments from papers to projects and presentations. In addition to giving students assessments that fit them, when participants differentiate their assessments, they felt they were also allowing students to take pride in what they learned and how they displayed their knowledge.

### **Research Questions Addressed**

This study was guided by four research questions. The questions explored the perceptions of private middle-school teachers about the need for, implementation, and value of differentiated instruction. The ideas of teachers for best-practice strategies were also sought. In this section, I discuss the themes in context with the research questions.

## **RQ1:** What are private middle-school teachers' perceptions on the need for differentiated instruction in the classroom?

Research Question 1 was addressed in Theme1 – Differentiation is needed in the classroom for all students. It was revealed in the study that all participants saw a need for differentiated instruction in their private middle-school classrooms. Although the students must take an exam to be admitted into the school, they still have a wide range of abilities, learning styles, strengths, and weaknesses that are evolving and changing each year (Participant 4). Additionally, since the participants are in a private school, they have more freedom to allow students to explore their learning styles and perceive differentiation as a great way to do this (Participants 2, 3, & 6). Although they believe it is useful in many situations, some of the participants believed is differentiation is not needed for all their lessons and assessments. For example, when they are teaching a new concept that is very broad or just an introduction to a new concept they are about to cover (Participant 5).

Additionally, when discussing opinions or giving a pop quiz, Participants 1 and 3 did not see a need to differentiate.

# **RQ2:** What are the perceptions of private middle-school teachers' with implementing differentiating instruction in their classroom?

Teachers provide insight for Research Question 2, which was addressed in Theme 3 - there are limitations that make it difficult to differentiate. Each of the participants faced various limitations that made it difficult for them to differentiate as often as they hoped. The limitations that the participants faced were lack of time to plan and carry out differentiation, access to resources for all learning types and levels, how to differentiate complex material, and unrealistic expectations from the parents and administration.

Although the participants identified various limitations that they believed restricted their implementation of differentiated instruction, they still perceived it as beneficial when they were able to implement it in the classroom. This was further discussed in Theme 4 - differentiation demonstrates an understanding of skill. When differentiating, participants found that students were able to demonstrate their understanding of the material at a higher level. Some believed this was because students were able to demonstrate mastery in a way that best suited their learning strengths. Even though the participants perceived limitations that made implementing differentiation difficult, they also saw the benefit for the students when they used the instruction model.

## **RQ3:** What value do private middle-school teachers perceive in differentiating their instruction?

Throughout the data analysis, I found that private middle school teachers perceive differentiation as rewarding to both them and their students. This was further addressed in Theme 2 - Attitudes change when differentiation is used. The instruction method was seen as rewarding for the participants when they could see that it was working and their students were joyful to learn (Participants 3, 4, 5). The other perceived value of differentiated instruction that all the participants saw was the increase in confidence, greater independence, and higher level of engagement from the students. In addition to the value differentiation brought to the students, the participants also perceived differentiated instruction as an opportunity for them to be less constrained in their instruction and be freer to follow the needs of the students (Participants 1 & 3).

Another value that was uncovered in the data analysis was found in Theme 5 - The use of differentiation builds relationships amongst teachers and with their students. Most of the participants felt that the relationships that had with their colleagues were strengthened when they worked together to discuss effective ways to differentiate and plan lessons together (Participants 1, 3, and 4). However, some of the participants did not see the same value in differentiation. Rather, they believed it made relationships with some colleagues more difficult when they did not agree on the importance of the instructional method and refused to change their ways (Participants 2 & 6). While the relationship amongst colleagues may not always be strengthened by the use of differentiation, the participants felt their relationships with their students was reinforced,

making differentiated instruction a valuable tool for them. Due to the nature of differentiated instruction, teachers and students spend more one-on-one time together (Tomlinson, 2001). This time not only built trust and understanding, but also strengthened the bond between the participants and their students (Participants 3, 4, 6). **RQ4: What strategies do private middle-school teachers identify as best practices** 

#### for differentiating instruction in the classroom?

The participants identified two best practices when differentiating their instruction. These practices were discussed in Theme 6. Although each of the six participants found different practices that were best for their students, each believed offering their students choices in how they approached homework, classwork, and assessments, was the most beneficial for their students. How the participants differentiated instruction, or the choices they offered, was influenced by the subjects they were teaching.

One of the participants, an English teacher, spent a great amount of time designing writing prompts that would appeal to a wide range of learners and allowed students to choose which prompt they wanted to use at the end each book for their assessment (Participant 1). This allowed students to write about what they best understood in the reading and demonstrate their knowledge. Participant 3, also an English teacher, offered choices to their students when learning grammar, vocabulary, and writing techniques. These teachers often allowed students to choose between the use of color coding, pictures that relate to the material they are learning, and games, in order to memorize and master the content.

Participant 2, a history teacher, also allowed choices in prompts for writing. For example, "when exploring early civilizations the students had a variety of written materials, some shorter some longer." Participant 2 also shared that a best practice was "offering a variety of reading materials on the subject (textbook, magazines, online articles, and primary documents), videos, and artifacts to explore to help build an understanding." By offering various ways to learn the material, students were able to select what was best for them in terms of interest, activity, and learning style, so that they could retain the material better.

Participants 4 and 6 were both science teachers that met together to discuss what differentiation practices were most beneficial to their students. They discovered that they were using similar techniques that were working best for all their students, particularly when it came to learning new content and the way they assessed students at the end of each unit. Therefore, after meeting, the teachers began using the same practices for all of their classes. Participants 4 and 6 both used videos, pictures, and allowed for hands-on activities when teaching new materials. At the end of units, students were allowed to choose between handwriting, typing, or verbally giving their responses to the test questions (Participants 4 & 6). The teachers believed that by offering these choices, students were able to choose what was best for their learning style, which the participants felt was the best way to differentiate their instruction.

For math classes, Participant 5 found that the best type of differentiating they could provide to their students was doing learning tables. In these tables they would pair students of different levels of understanding of the material together so that they could

teach each other. Participant 5 would then visit each group to ensure the students were mastering the material.

Although the participants gave different choices to their classes, each participant shared that the best practice they could use for differentiating was to have a variety of options for their students to choose from when learning new content and assessing their knowledge. In doing so, the wide range of students' abilities were reached, and students were able to use their individual learning strengths to learn and grow their knowledge.

#### Summary

In this chapter, I presented the results from data that was analyzed using Nvivo, a qualitative software, to code responses and discover emergent themes. The purpose of this qualitative case study was to explore, in a private school in a south-central U.S. state, middle school teachers' perceptions of, expectations about, and experiences with differentiated instruction. Four research questions guided the data collection. The research questions were developed based on the theoretical framework of differentiated instruction developed by Tomlinson (2001). The research questions sought to understand teachers' perceptions on the need for differentiated instruction, implementation, value, and strategies for best practice. Six themes emerged: (a) differentiation is needed in the classroom for all students; (b) attitudes change when differentiation is used; (c) there are limitations that make it difficult to differentiate; (d) differentiation demonstrates an understanding of skill; (e) the use of differentiation builds relationships amongst teachers and with their students; (f) educators that differentiate offers choices to their students.

The six themes together describe the participants' perceptions of their experiences, challenges, and rewards in differentiating instruction in the classroom.

The six emergent themes identified provided a greater understanding of the learning activities and experiences that were valuable for teachers and students. Evidence of the challenges and pressures experienced by the teachers was revealed by the data analysis. Although there was variation amongst the participants regarding the experiences and limitations, all participants expressed their value of differentiation. The data analysis and emergent themes revealed the many similarities among the participants in their frustrations when differentiated instruction did not work for various reasons, and their joy when it did. All participants expressed building stronger relationships with their students and colleagues, as the result of differentiating instruction.

Chapter 5 is a synopsis of the study with an interpretation of the findings. Limitations of the study, future research recommendations, social change implications, and my conclusions based on the results of the study also discussed. Chapter 5: Discussion, Conclusions, and Recommendations

In this qualitative case study, I explored private middle school teachers' perceptions, experiences, and implementation of differentiated instruction. The data collected through a survey and in-depth, semistructured interviews allowed me to establish themes in my analysis. Yin (2011) advised researchers to use a holistic approach to qualitative case studies in which they investigate a phenomenon in its real-life context. To do this, I associated the themes in the data to understand the experience with differentiated instruction from real-life situations and perceptions of those who practiced them. In Chapter 5, I interpret the connection between that data and literature, discuss the limitations of the study, recommendations, implications, and conclude the study.

#### **Interpretation of Findings**

The purpose of this section is to present the results of this study in relationship to the literature review in Chapter 2. Discussed in Chapter 2 is the theoretical framework for this study, the literature on perceptions, limitations, use of, and false reality of differentiated instruction. Tomlinson's theoretical research on differentiated instruction was the framework used to examine middle school teacher's perceptions and use of differentiated instruction. In this chapter, I compare the findings with the experimental literature and the theoretical framework.

### **Defining Differentiation**

According to Tomlinson's framework, differentiated instruction is not a new theory or use of instruction in the classroom; rather, it is a way of teaching that reaches all learners based on their learning style (2000). Current literature shows that some teachers define differentiation as a teaching philosophy that is student-centered to fit the individual needs of the students (Lang, 2019; Moosa & Shareefa, 2019; Smets & Struyven, 2020). Several participants in the study had similar definitions to those found in the literature. Participant 1 defined differentiated instruction as, "Tailoring lesson plans to groups of students' needs." The participant makes the lessons fit the needs of various types of learners, not just one. Participant 2 felt differentiated instruction is, "Adjusting and adapting teaching to meet the needs of different types of learners that are present in the classroom." Participant 3 understood differentiation to be an "assessment of skills and content in a personalized manner to best suit the learner's strengths." Participant 5 also had a similar definition; "Differentiated instruction is when a teacher tailors lessons and corresponding activities to meet the needs of individual students or groups of students in one classroom." Based on the literature and the data from the study, it appears that teachers in general, and the participants agreed with Tomlinson, that differentiation is a student- centered approach to teaching that is tailored to their needs so that they can discover and understand the information being taught.

Based on the data collected for this study, teachers define differentiated instruction as a method of teaching that offers choices and variations to the content and assessments. Some of the participants in the study had similar definitions for differentiation as those in the literature. In addition to tailoring lesson plans to students' needs, Participant 1 also defined differentiated instruction as "Providing choices for them to pursue with regards to projects and assessments." Participant 4 also said that differentiation is "knowing about and implementing various ways of teaching a topic to the way that student learns best." Last, Participant 6 had a similar definition; "Differentiated instruction is keeping the content the same while allowing students different ways to access it." The way the participants and those in the literature defined differentiation align. It can be said that differentiation is offering choices, and various ways to learn allows students to select the material or method that best fits their learning strengths. While these definitions differ slightly, Tomlinson would agree that offering choices and variations is an essential piece of differentiated instruction (2014). In addition to aligning definitions, the data and the literature also show similar results with regards to the perceptions of differentiation.

#### **Perceptions of Differentiation**

Differentiated instruction is useful for students since it is a student-centered approach to teaching. Tomlinson (2000) believed that teachers should differentiate all the time in order to reach every student. This means differentiating the content, assessments, and learning environments. Based on the literature, teachers see the benefits of differentiation and what it can do for the students (Ginja & Chen, 2020; Haymon & Wilson, 2020; Herner-Patnode & Hea-Jin, 2021; Kloss, 2018). Looking at the results of the data, the participants in the private, middle-school also believed it is needed in their classrooms. It helps to build understanding of the content and demonstrates students' knowledge and mastery of the content (Participants 2, 4, 5, and 6). Differentiation is a way for teachers to reach students and allow each student to obtain knowledge the way that suits them. While it is useful, not every participant in the study or in the literature review felt differentiated instruction was always necessary. Tomlinson believed differentiation is always useful; however, based on the literature and data from my study, not all teachers agree. According to Tomlinson and Moon (2013), teachers should differentiate not only the instruction, curriculum, and assessments, but also the learning environment. While this is good in theory, when giving a pop quiz to simply discover if students did their homework, it is not necessary (Participant 1). When discussing opinions related to the content, Participant 4 did not see the benefit in differentiation. This was because the students are freely expressing their thoughts and opinions, they are not having to read or write, or demonstrate knowledge of the material, they are simply engaging in a conversation. Differentiation is also not needed when teaching a basic introduction to a lesson (Participant 5). This ensures every student gets the same basic introduction with no variations. Teachers seemed to feel that while it is not always seen as necessary, differentiation is useful and can be beneficial for not only students, but also teachers.

The literature in Chapter 2 showed that teachers' self-efficacy is tied to how they felt about differentiation, and how well they feel they adapt their instruction to their students. The sense of self-satisfaction conveyed by teachers in this study was supported by another study where teachers reported feeling good about themselves when they successfully used differentiation (Whitley et al., 2019). Participant 4 referred to differentiation as a joyful experience. Other participants felt happy when they could successfully change things up in the content and assessments to help their students and see that it is working (Participants 2 and 5). Seeing success in the students means that the changes to the content are working and the efforts of the teachers are worth it. Teachers

expressed that when they differentiated instruction they felt as though they were offering an invitation for their students to demonstrate understanding and have fun while learning (Tomlinson & Moon, 2013). When differentiation was working, teachers felt good about their instruction and what they are doing for their students. Students also reap the benefits of differentiation in the classroom.

Students can benefit from the use of differentiated instruction both in increased knowledge and self-efficacy. When using differentiation, Tomlinson (2001) believed that students not only gain deeper understanding of the material, but they also gain independence in their learning. The literature study and data findings of this study indicate that teachers agree with Tomlinson. When learning is differentiated, students get to make choices in their learning, which gives them the reigns to make choices that are best suited to their individual learning needs and allows them to feel independent (Tobin & Tippett, 2014). This means that some of the responsibility falls on the student. Therefore, when they master a skill, they know their choices helped them learn, not just the selections of the teacher.

According to Tomlinson (2001), "all students need to be guided in assuming a growing degree of responsibility and independence as a learner and member of a community of learners" (p. 23). To gain this independence, students have to be given the ability to make choices and learn on their own what works for them and what does not. With the use of differentiation, teachers guide students and give them a say in their learning, teaching students more academic independence. Similar to the expressed beliefs of the teachers in the literature, one of the participants felt that when they differentiate instruction, they give students an opportunity to make choices and walk-through instruction independently (Kloss, 2018; Participant 5). Participant 5 explained that with differentiated instruction, various types of materials and approaches to the content are often given, allowing the students to pick which one aligns best with their learning style. Allowing students to choose how they approach an assignment, and then see their own success within their choice, gives them the confidence to know that they can do more (Participant 6). Independence is an attribute that helps all students throughout life and learning that they can make choices in their own learning and successfully gain knowledge and understanding pushes students further and creates not only success in school, but also life.

In addition to independence, differentiated instruction also increased students' confidence in their academics, and teachers' confidence in their instruction. Based on the literature review, students' confidence increases as teachers differentiate, because they can demonstrate their mastery of a skill in a way that suits them correctly, and teachers' confidence increases because they know they are making changes to the instruction that is meeting their students' needs and learning styles (Aldossari, 2018; Godor, 2021). Participant 3 shared that students' confidence builds as they go through a topic, especially when they are able to successfully show their knowledge of the material on an assessment. This in turn made Participant 3 feel confident in the way they differentiated the lessons. Moreover, Participant 5 stated that, "For me now, I know a plan went well when students exhibit confidence in what they learned and how they applied the skills."

they are making the right decisions that fit their students' needs. The literature and data both revealed what Tomlinson maintained, that differentiation not only allows students to learn to the best of their ability, but it also increases the confidence of the student and teacher. Although the literature and data findings revealed that teachers believed differentiation is good for both them and their students, there are limitations that the teachers in both the literature and study indicated were a hinderance to their ability to differentiate.

#### **Limitations of Using Differentiation**

Expectations are placed on teachers by administrators and parents and limits their desire to differentiate instruction all the time. When using differentiation, students should gain a deeper understanding of the material they are being taught since the content, product, and assessment are altered to fit the students' needs and learning style (Tomlinson, 2001). Administrators expect their teachers to instruct students and employ them with set academic standards each year, especially those that help students pass the end of the year standardized test given by the state. Based on the literature in Chapter 2, one can infer that teachers fear that if they differentiate, the content and assessments will be weakened and then the students will not master the concepts that are needed for end of the year testing (Jackson & Evans, 2017; Tomlinson, 2014). If the students do not do well on the end of the year test, teachers may be questioned. Although the literature findings suggest that public school teachers feel the pressure from their leaders, participants in the study disclosed that private school teachers also feel pressure from the students' parents, in addition to the administration.

Expectations from the administration and parents at the school in the study often limit the participants' ability to differentiate their instruction. The expectation at the private school in the study is that parents are paying for their students to go to a school of prestigious education, and they will in turn receive good grades (Participant 1). As long as the administration uses students' grades to measures success, not growth and ability, differentiation will be difficult to implement (Participants 1 & 2). Tomlinson (2001) believed that grades should be "based on individual goal setting and progress in reaching those goals, and that students will be 'graded against themselves' rather than in competition with other students" (p. 93). While this approach may seem preferable, the school in this study grades on a weighted scale system and compares the students based on their letter or number grade. Parents also wanted to see their child's grades and often ask the participants to compare the student's success to that of their peers (Participant 2). Participants expressed concern that if parents are putting pressure on teachers to show where one student stands compared to another, differentiation will be hard because it does not focus on the group as a whole, rather it focuses on the individual.

Based on the literature review in Chapter 2, and the data from this study, time seems to be the main obstacle teachers must overcome in order to differentiate. Although it may seem that differentiation is tailoring content, lessons, and assessments to the individual students, not the class as a whole, differentiation does not have to take an a great amount of time. Tomlinson (2001) believed that there are approaches to differentiate instruction that do not take a lot of preparation time: book options on the same topic, reading buddies, journal prompts, games, partner/alone work, teacher-student goal setting, etc. While Tomlinson did not view all differentiation strategies as time consuming, some teachers would disagree. No matter how simple the strategy may seem, some teachers are reluctant to try because they assume it will take a lot of extra time to plan and design their lessons (Godor, 2021; Whitley et al., 2019). Participants in the study complained that time is already limited in the school day, so finding more time to design student-centered curriculum is difficult.

According to the data findings from this study, when the school in the study went on a block schedule, time became more limited. Prior to the change, when classes met every day for fifty minutes, the participants felt challenged to get everything accomplished. On the block schedule the teachers only see their students every other day, and although it is for eighty minutes, the teachers found find it very difficult to cover the curriculum, as well as make changes to the content and lessons to fit each learner (Participant 3). With limited classroom time, and not enough preparation time, differentiation is difficult and often not possible for all lessons and assessments.

For those teaching in a public school, meeting certain standards each year is the priority. When challenged to achieve all standards, teachers may choose to alter the lessons to be student-centered as a way to accomplish meeting the standards (Gibbs & Beamish, 2021; Godor, 2021; Pozas et al., 2020). Part of differentiation is making sure students master a skill or content, but when teachers must spend extra time waiting for all students to master the skill, they are then forced to make up time in other areas. Teachers may have to spend less time on future lessons and assessments to make up for lost time. The standards that teachers must cover each school year can be daunting, especially if

students are not grasping concepts quickly. Tomlinson (2001) found that although differentiation takes more time, when used, students' master the content and skill, not just learn it for a test, because they are learning based on their individual learning styles. As a result, slowing down and making sure students can learn and apply what they have learned is more important than getting through all the standards in a year at the risk of students not understanding what they have been taught (Participant 5; Kolb, 1984).

Although the participants are not held to the same curriculum standards as publicschool teachers, they do have to meet certain criteria set each year by the private school administration. Participants 3 and 4 expressed that they too feel the pressure of time weighing on them. Consequently, based on the findings, some of the teachers in the study eliminated things out of their curriculum because they realized they could not accomplish everything in the allotted time (Participant 1). If they cannot get all their projects and instruction done because of a lack of time, planning for differentiation may seem impossible, especially if it means planning outside of school hours.

For differentiation to successfully work, teachers have to spend time preparing for their lessons, but if they do not have the necessary preparation time, then they must work outside of the school day hours to adjust their instruction. Jackson and Evans (2017) maintained some teachers spent time at night and on the weekends preparing for lessons. While the participants in this study did not talk about spending time at night to work on differentiating their lessons and assessments, they do meet with their students one on one before school to ensure students understand what they are learning (Participants 2, 5, and 6). Meeting one on one with students about the material is a way teachers can differentiate their content, but it does take extra time (Tomlinson, 2001). Knowing that they are limited in their day, and sometimes their preparation of a lesson or assessment, teachers from the private middle school in this study, like those in the literature, are willing to spend their personal time outside of the school day hours to help their students obtain knowledge and master skills.

Although it was not mentioned as a direct limitation that prevents participants from differentiating instruction, the lack of professional development on differentiated instruction was discussed. Some of the participants indicated that while they have received professional development on differentiation, it was not provided by the school. Participant 5 said, "My professional development on differentiated instruction has come from attending conferences." While Participant 6 mentioned, "My training came through my master's program in curriculum and assessment or through other schools." Some of the participants expressed that they would like if the school had provided some type of professional development for differentiated instruction. Participant 2 alleged, "If I were in charge, I would devote time and resources into the topic." Indicating that this participant sees the need for this type of instruction of the teachers. Participant 4 would "like to receive more information about choices in differentiation." Based on the data, if the school were to offer professional development on differentiated instruction, the participants would find it useful and attend.

## Limitations of the Study

Since the sample size for this study was small, only six participants, and the participants came from one school, generalizability was a limitation. The small sample

size and use of only one middle private school could impact the ability for other middle private schools to generalize the findings of this study in the context of their school. Another limitation of this study is timing. Since this was a qualitative case study for a dissertation project, the time to collect data was shortened. The timing was selected to align with the study, but the shortened window did not allow for data collection over time. Participant responses were collected and analyzed at one point in time, capturing the perceptions at that moment. A longitudinal study might have beneficial in documenting changes or the static nature of perspectives and experiences over time. With more time, more educators could have participated in the study, giving a larger participant pool to compare data and results to.

#### Recommendations

The purpose of this qualitative case study was to explore, in a private school in a south-central U.S. state, middle school teachers' perceptions of, expectations about, and experiences with differentiated instruction. Six participants took place in the study. Based on the scope of this study and the findings, there are some recommendations to consider for future research. One recommendation would be to expand the study to private elementary school and high school teachers, which could improve the generalizability of the study. Another recommendation would be to explore how students perceive the use of differentiation and its success when used in the classroom. This would help identify students' feeling about differentiated instruction and strengthen an argument for why teachers should use it in their classrooms. A final recommendation would be to compare the perceptions, implementation, instructional experiences, and practices of private

school teachers to public school teachers. Since there are differences in credentialing and standards of practice for private and public-school teachers, it may be beneficial to study differentiated instruction with those factors in mind. Public-school classrooms tend to have a large diverse group of learners, however, private school classrooms may be diverse in terms of learning styles and abilities; therefore, differentiated instruction is valuable in both the private school and public-school settings.

#### Implications

This qualitative case study focused on the implementation, instructional experiences, and best practices of differentiated instruction in private middle school teachers. The findings of this study may help educators in the future approach differentiation with clear expectations and better understanding of the limitations that may make differentiating instruction difficult. By knowing what confinements others have faced, educators can plan ways to combat those limitations and make differentiation easier. The best practices that the participants shared can aid future educators that are looking for ways to differentiate instruction. Knowing what has worked for other teachers in the past can eliminate the guessing game of what will work and what will not. Additionally, knowing how the use of differentiation improves colleague relationships and teacher, student relationships can increase other educators desire to differentiate education.

This study adds to the literature private middle school teachers' perceptions about differentiated instruction, in addition to the limitations they face when trying to differentiate, and they and their experience with implementation of differentiation in their classroom. The findings of this study interpret and explain what the participants said about differentiated instruction: that differentiated instruction is needed for all students and should be used in the classroom as stated by Tomlinson (2001) in the differentiated instruction theory.

#### Conclusion

The use of differentiated instruction in the classroom is important to improving the education of all students and meeting them where they are as learners (Tomlinson, 2000; 2005). The data from the study indicates that differentiation benefits all students and should be used in the classroom. The increased demand for educated workers in the 21<sup>st</sup> century has made the use of effective learning imperative. Furthermore, the understanding of how students learn differently and the multiple intelligences that each student poses makes it necessary to reach each student where they are as a learner (Dewey, 1990; Tomlinson, 2014). Effective instruction can not only help students learn but can also bring joy to their education.

Six participants from one private middle school in a south-central state participated in this qualitative case study. The conceptual framework for this study was based on Tomlinson's (2000) differentiated instruction theory. Through a survey and semistructured interviews, participants were asked about their perceptions, implementation, instructional experiences, and uses of differentiation. The data reveled that while the participants do believe differentiation should be used and is effective, they do not think it is always necessary. At times, limitations make differentiating difficult for educators, even when they want to alter their instruction. With professional development that focuses on differentiated instruction, and more time to collaborate with colleagues on how they are successfully differentiating, participants can have additional choices on how to alter their curriculum and assessments and feel more confident in differentiating their instruction. By implementing differentiation in the classroom, students' confidence, and independence increase, in addition to their relationships with their teachers.

Differentiated instruction helps students learn and apply their skills to new situations in the future.

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## Appendix A: Survey Questions

1. How do you define differentiated instruction?

2. Why do you feel differentiated instruction is needed, or not needed, in your classroom?

3. Tell me about how you different instruction.

4. Why do you feel differentiated instruction is effective for the students, or not effective?

5. Tell me about the limitations that effect your implementation of differentiated instruction?

6. What professional development on differentiated instruction have you had while working at **Example**?

7. How does time (time to prepare and time in class) impact your use of differentiated instruction?

8. Tell me the ways differentiated instruction impacts your relationship with your colleagues?

9. Tell me the ways differentiated instruction impacts your relationship with your students?

## Appendix B: Interview Questions

- 1. How long have you been teaching?
- 2. What subject(s) do you teach?
- 3. What grade do you teach?

4. Tell me more about how you define differentiated instruction.

5. You shared why you feel differentiated instruction is needed, or not needed, in your classroom; would you give me some examples of how you decided it was or was not needed?

6. You told me how you differentiated instruction. How did you feel about those experiences when it worked, and when it did not work?

7. How do you feel when it seems that differentiated instruction is effective for the students? What is the experience like? How can you tell it is effective? How do you feel when it seems that differentiated instruction is not effective for the students? What is the experience like? How can you tell it is not effective?

8. You shared the limitations that effect your implementation of differentiated instruction. Do you feel that you have any control over those limitations? If so, what?

9. One of the questions asked you about your professional development on differentiated instruction while working at **Can** you describe those experiences? If you were in charge of professional development, how would it be different or the same?

10. You discussed how time to prepare and time in class impacts your use of differentiated instruction. If you could wave a magic wand, what would you change about the time factors?

11. Would you share a bit more about how differentiated instruction impacts your relationship with your colleagues?

12. One of the questions asked you to share the ways differentiated instruction impacts your relationship with your students. Would you expand on that a bit?