CHALLENGING THE GIFTED LEARNER VIRTUALLY: A PHENOMENOLOGICAL STUDY

by

Amanda Jeane Price

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

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Abstract

The purpose of this transcendental phenomenological study was to describe the experiences of core academic middle school teachers with differentiating instruction and assessment for gifted and talented students in rural southern Maryland. Two theories providing the theoretical framework for this study include Bandura's self-efficacy theory and McClelland's achievement-motivation theory These two theories explain learning experiences and interactions between the learner and the instructor while addressing the educator's efficacy in challenging gifted learners within the virtual classroom. The central research question that guided this research was, "What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?" The instrumentation for this study was a set of open-ended questions conducted in a face-to-face interview, archival data in the form of document analysis and journal prompts. Data were analyzed by the researcher using MAXQDA qualitative data analysis software. Three themes emerged, including efficacy dependent on available supports and strategies, the challenge of teaching virtually, and positive attitudes and beliefs toward differentiation. The themes that developed revealed that the participants experienced conflicting attitudes toward differentiating for gifted students and felt ill-equipped differentiating instruction for this group of students. The results of this study may inform the body of knowledge regarding the education of gifted learners and address acceleration practices to improve challenging this population in the classroom and achieve academic success.

Keywords: giftedness, virtual instruction, differentiation, middle school, rigor

Dedication

I dedicate this dissertation first to God, my creator, from whom all good things flow, and through Him all things are possible (James 1:17; Matthew 19:26). Next, I dedicate this dissertation to my family and friends who believe in me even when I didn't believe in myself. Thank-you for the love and support you bestow upon me even when I am not deserving. Erric, you have been my rock through this process. You knew this was God's plan for my life before I did. You encouraged me every step of the way and you always believe in my abilities. Mom and Dad, you always told me I can do anything and told me I would be a doctor one day. You saw God's call on my life even at a young age. Thank you for your prayers, encouragement, and unconditional love. Sarah and Rebekah, may you pursue God and his call on your life. May you seek knowledge and truth throughout your lives. I see so much of myself in you both and you are destined to do great things. To my grandmother, Lila Lee and her sister Willene Yates, you both taught me what it means to be a great teacher and encouraged me through my first-year teaching. You taught me through your selfless actions and compassion you had for all your students. Finally, to my Great Aunt Willene Yates who pursued her Ph.D., but did complete it with the fear she would have to leave the classroom. I finished the journey you began, and I know that you are proud of all my accomplishments. I know that you are smiling down on me from heaven and share in my joy.

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Table of Contents

List of Tables

List of Figures

List of Abbreviations

Adequate Yearly Progress (AYP)

Cognitive Abilities Test (CogAT)

Code of Maryland Administration Regulations (COMAR)

Every Student Succeeds Act 2015 (ESSA)

Gifted and Talented Education (GATE)

Individual Disability Education Act (IDEA)

Individualized Education Program (IEP)

The Measures of Academic Progress (MAP)

National Association for Gifted Children (NAGC)

National Defense Education Act (NDEA)

No Child Left Behind Act of 2001 (NCLB)

Professional Learning Community (PLC)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this transcendental phenomenological study was to describe the experiences of core academic middle school teachers with differentiating instruction and challenging the gifted learner in rural southern Maryland. This study was important as Maryland state law governing the instructional services for gifted and talented students has recently changed. Consideration of this phenomenon included the virtual instruction received during the pandemic of 2020 (Velichová et al., 2020). The Covid-19 virus introduced a shift in education that opened virtual classrooms. However, the virtual environment posed a problem in the field of education as educators were inexperienced in providing a challenging curriculum for high achieving students thus placing them at a greater risk to underachieve (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020). Additionally, a high degree of diversity, wide range of skill and cognitive levels integrated into modern classrooms makes it merely impossible for educators to meet the unique needs of individual students while promoting rigor and challenge (Eddles-Hirsch et al., 2010; Tomlinson, 2015; Tournaki, 2003). This issue alone has caused many gifted students to frequently receive the same instruction as their peers, and spend most of the instructional time not learning, disengaged, and underachieving (Rodriguez, 2016). This is an equity gap and a current issue in our schools today (Wolter, 2016). Lastly, many schools use online programs as accelerated programming for gifted and talented students (Cyr, 2004; LeBeau et al., 2020; Rotigel & Fello, 2004). Understanding what teachers experienced as they plan differentiated instruction and assessments for gifted learners may improve the quality of instruction in both these accelerated programs, as well as the integrated virtual classroom.

Additionally, the insight into their experiences may promote the advancement of programs to support educators who work with this unique population.

The purpose of Chapter One is to discuss the need to explore the phenomenon based on the historical, legal, social, and theoretical context. In addition to the background information, Chapter One will also provide the reader with the problem statement, purpose statement, significance of the study, guiding research questions, definitions of terms used. Chapter one will end with a summary of the topics covered.

Background

Education is at the core of American heritage and a canvas of U.S. history. Throughout the 17th and 18th centuries, small schoolhouses were at the core of the community. The end of the Civil War marked the beginning of a change in the United States. Society began to shift from a rural and agriculturally based economy to one of technology and industry (Gutek, 2011). It was during the industrial revolution that gifted education was born. The late nineteenth century reconstructed American schools and society through industrialization (Gutek, 2011). Science and technology were at the forefront of American culture and educational philosophy began to look more pragmatistic (Cohen & Crabtree, 2006).

Immigration began to rise in the 1800s (Library of Congress, n.d.), but due to "Americanization" immigrant groups tended to stay together and create communities and establish parochial schools (Gutek, 2011; Janak, 2019). It was during the American Revolution, that prominent leaders, such as Noah Webster and Thomas Jefferson, saw the connection between education and revolution (Janak, 2019). If the new republic was going to last, a common language must be established and the public education system was born (Gutek, 2011; Janak, 2019; Jolly, 2018).

It is in the establishment of this early school system that the faltering attempts to accommodate the unique learning needs of gifted children can be traced (Jolly, 2018). Formal programming efforts to serve this population did not begin until the mid-nineteenth century (Janak, 2019; Jolly, 2018). Prior to the Immigration Act of 1917 ("Immigration Act of 1917 (Barred zone act)," 2020), immigrant children were not required to read and write. However, this one act led to over 11 million children infiltrating American Public schools (Janak, 2019; Jolly, 2018). This large influx of students increased both the diversity in learning abilities and readiness levels that teachers and school administrators had never encountered (Janak, 2019; Jolly, 2018). In turn, this led to a need for new educational philosophies in the fields of inquiry, educational psychology, and eventually gifted education.

At this time, John Dewey revolutionized education through his theories that emphasized the importance of the classroom environment. His teaching methods included a focus on hands-on activities, problem-solving, experimenting, projects, and collaboration (Janak, 2019; Cohen & Crabtree, 2006). According to Dewey, the curriculum should be integrated with the experimental properties of science, collaboration, and a democratic environment (Janak, 2019; Gutek, 2011). Inductive reasoning allowed for students to think critically, solve problems, and discover truth (Licht, 2014; Lynch, 2018). Inquiry-Based learning was first introduced by John Dewey, and he often advocated for learning through evidence-based inquiry, critical thinking, and extensive evaluation (English, 2019). This progressive movement was the beginning of gifted education in the United States (Jolly, 2018). However, it was not until 1950 (Jolly, 2018), a formal definition for giftedness was developed and accelerated and enrichment programs were established to challenge the gifted learner (Carman, 2013).

Historical Context

In 1958 (Jolly, 2018), the most brilliant minds were recruited to combat the Soviet Union as the space race was launched (VanTassel-Baska et al., 2021). It was at this time, the American school system began to embrace the idea of identifying and challenging capable students (Jolly, 2018). Schools across the nation launched advanced course offerings that gave gifted students options for condensing coursework and access to early college entrance programs (VanTassel-Baska et al., 2021). Additionally, the National Defense Education Act (NDEA), the first formal federal support of gifted education, was established to improve math, science, and foreign language competency among elementary and secondary students. This one act initiated the integration of these more complex subjects into the curriculum (Richmond et al., 2020; VanTassel-Baska et al., 2021). However, it was not until 1972 (Jolly & Robins, 2022) that a formal federal definition of a gifted child was established in the Marland Report to Congress, and it was modified to its current definition in the No Child Left Behind Act of 2001. The Marland Report (1972) was the first national report conducted by educational commissioner Sidney Marland under the orders of U.S. Congress to assess and make recommendations on the state of education for high-ability learners (Jolly & Robins, 2022). Although the report's recommendations were not enacted, it catalyzed improvements in state policies and plans in the 1970s for gifted education (Jolly & Robins, 2022; VanTassel-Baska et al., 2021). It took approximately twenty years later for both the federal government and state governments to have some form of legislation regarding gifted education (National Association for Gifted Children). However, there is no federal mandate regarding the identification or education of gifted and talented students but selected federal funding support for gifted education (VanTassel-Baska et al., 2021; Wrights Law, 2015).

Unfortunately, priority funding is provided to gifted programs that serve students who are traditionally underrepresented in gifted education, but also provided to improve services for all

gifted students (Jolly & Robins, 2022). However, due to the cost of gifted programming, funding is not enough, and schools depend on grants. In 1988 (Jolly & Robins, 2022), the Jacob Javits Gifted and Talented Students Education Act was established to provide schools with strategies to educate gifted children and conduct research. In 2002 (Jolly & Robins, 2022), the Javits Act was sanctioned under the No Child Left Behind Act (2001) and expanded to offer grants for gifted education (United States. Office of Education, 1966). However, the current number of schools with gifted programming is declining (Yaluma & Tyner, 2020), and recent educational reforms have shifted the focus of education to reach disadvantaged students (Every Student Succeeds Act, 2015; Race to the top, n.d). Yet, gifted program participation has increased faster in low-poverty schools, and suburban schools are more likely to have gifted enrichment programs (Yaluma & Tyner, 2020). As of 2016 (Atkinson, 2016; van Manen, 2016), the African American and Hispanic populations continue to be statistically underrepresented in gifted education, and many other students have not been properly identified (Yaluma & Tyner, 2020).

Before 2019, in the state of Maryland, gifted students, except for twice gifted students who hold an IEP, do not receive services during the regular school day (Maryland State Department of Education, 2019). While many Maryland middle schools have math acceleration programs that allow students to move through the curriculum at a faster pace, these programs are not just reserved for the gifted and talented student population (Maryland State Department of Education, 2019, 2020). Most gifted programming is integrated in the common core standards for math and English Language Arts (Maryland State Department of Education, 2019, 2020). While acceleration is a form of intervention for gifted students, there is currently only after-school enrichment programs offered outside the current curriculum (Maryland State Department of Education, 2019, 2020). Additionally, recent global events and the increase in distance

learning provided a means to differentiate the curriculum and provided access to instruction that is customized for this exceptional group of students, but many teachers lack the proficiency to scaffold instruction to promote rigor and challenge (Adams & Cross, 1999-2000; Eddles-Hirsch et al., 2010; Mulrine, 2007; Sweetman, 2021).

Social Context

In addition to teacher proficiency, schools are not preparing students to be effective members of society. In 2008, ACT scores show that fewer than two in ten eighth graders are on target to be ready for college-level work by the time they graduate from high school (Cavanagh, 2009). 80% of eighth-grade students are not on track to be college and career-ready by their high school graduation (Cavanagh, 2009). In response to this issue, President George W. Bush passed the No Child Left Behind Act (NCLB) in 2001 (Parkay et al., 2014, p. 309). This act mandated state testing in reading and mathematics for students in grades 3-8, and student achievement data on the state test to determine if schools met their adequate yearly progress (AYP). If schools did not achieve AYP, they potentially lost federal funding (Parkay et al., 2014, p. 309). Although the Obama administration has made some changes to NCLB with Race to the Top legislation, schools are still required to test students in grades 1-8 in reading and mathematics.

However, with NCLB, the emphasis on test performance on high-stakes state testing has altered the implementation of curriculum and instruction in a manner that is not suitable for the learning of all students. High stake testing required by NCLB has had an immense impact on the methods of instruction and student learning (Parkay et al., 2014, p. 309). Many schools have cut out other subjects and enrichment programs to focus more on reading and mathematics (Parkay et al., 2014, p. 309). Consequently, the educational goal is to lower the percentage required to pass by teaching to the middle (Parkay et al., 2014). Delivering instruction in this manner does

not ensure that all students recieve the instruction necessary to be on target for college and career by high school. Not to mention, that legislation has neglected gifted students (Tomlinson, 2015).

In the classroom, gifted students show high self-efficacy and academic motivation, therefore are less carefully monitored in the inclusive classroom (Gehlbach & Roeser, 2002; Tomlinson, 2015). While gifted education varies widely across the United States, the National Association for Gifted Children states that these students account for roughly 6% of the school-age population or 3.2 million students that are enrolled in gifted and talented programs nationwide (National Association for Gifted Children, 2020). However, this data does not account for the many students who qualify but have not yet to be identified (National Association for Gifted Children, 2020). Unfortunately, not all public schools have programs that enhance the learning for gifted and talented students, and they are not mandated to provide the necessary programs under federal law (National Association for Gifted Children, 2020; Wrights Law, 2015). Although federal law acknowledges that children with gifts and talents have unique needs that are not traditionally offered in regular school settings, it does not provide provisions, mandates, or requirements for serving these students during the regular school hours (National Association for Gifted Children, 2020; Wrights Law, 2015).

Currently, gifted education is a purely local responsibility and is heavily dependent on local leadership (National Association for Gifted Children, 2010). On the other hand, federal laws, such as the Individuals with Disabilities Education Act (IDEA), the civil rights act, Section 504, and the Americans with Disabilities Education Act ensure that students with special needs receive the required support and services to be successful in the classroom (Zirkel, 2009). Not providing gifted students with the necessary assistance increases variability in the quality of services and creates inequities of access for students in poverty, racial and ethnic minority

groups, English-language learners, and those with disabilities (McCoach & Siegle, 2003; National Association for Gifted Children, 2010). These students are further at risk to achieve below their potential (Horak & Galluzzo, 2017; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). Therefore, these students must engage in a curriculum that is consistent with their abilities and meets their different pedagogical needs (Tomlinson, 2015).

Furthermore, the inclusive classroom contains a wide range of cognitive capabilities, and teachers do not always understand the importance of differentiation (Tomlinson, 2015). Consequently, gifted students usually receive the same instruction, assignments, and expectations as their peers and are not adequately challenged (Eddles-Hirsch et al., 2010; Rodriguez, 2016). Without being properly challenged, although having intrinsic motivation, gifted students do not achieve their full potential and can become mentally lazy, even though they do well in school (McCoach & Siegle, 2003; Tomlinson, 2015). Therefore, teachers must ensure high-quality, differentiated instruction that meets the pedagogical needs of gifted students without neglecting the range of abilities present in the classroom (Tomlinson, 2015, 2018; Tomlinson et al., 2003). While federal law does not mandate schools to provide the necessary programs or accommodations for gifted and talented students during the school day (Zirkel, 2009), educators must consider that students, classified as gifted, have different pedagogical needs and the curriculum must be consistent with their abilities (National Association for Gifted Children, 2020; Wrights Law, 2015). Consequently, these students are underserved, and their needs are not always met in the mainstream classroom (Zirkel, 2009). In addition, many general educators report that they do not know how to properly challenge gifted students while scaffolding instruction to meet the needs of struggling students simultaneously through instruction (Tomlinson, 2015).

The current literature explains how the lack of differentiation and challenge influences both student learning and academic performance in the inclusive classroom (Callahan et al., 2015; Eddles-Hirsch et al., 2010; NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2010; Purcell et al., 2002; Tomlinson, 2015, 2018). This struggle to implement inclusive education is a nationwide problem (Moberg et al., 2020). Furthermore, it is a disservice not to provide gifted students with a curriculum and instruction that meets their cognitive demands (Tomlinson, 2015, 2018). To prevent underachievement, gifted students require a level of challenge within the inclusive classroom that engages them and motivates them to achieve their capabilities without neglecting other students (Gehlbach & Roeser, 2002; Karantzas, 2019; McCoach & Siegle, 2003; Merritt, 2016; Taylor, 2016; Tomlinson, 2015). However, understanding the shared experiences among middle school teachers and how to increase rigor and challenge is important to the development of instructional practices to reach all students. Inclusive education is a practice of establishing equitable heterogeneous classrooms, and gifted students should not be neglected (Gehlbach & Roeser, 2002; Nagpal, 2018).

Theoretical Context

The lack of empirical evidence concerning the effects of quality curriculum and differentiated instruction is a limitation for serving gifted and talented students (Callahan et al., 2015). Currently, little qualitative research has been conducted surrounding middle school gifted and talented students and the shift of instruction due to the recent pandemic. While many studies support the necessity for teachers to challenge students in both the hybrid and virtual models, there are still many new stimuli and unanswered questions in the field of educational research (Adedoyin & Soykan, 2020; Velichová et al., 2020). One of the most studied and current topics in educational research is online learning. While both digital and distant learning has been

around for several years, the pandemic caused many teachers to change the method in which they deliver instruction, engage students, and enrich the learning experience (Adedoyin & Soykan, 2020; Richmond et al., 2020; Velichová et al., 2020). This shift caused many instructional challenges, but has ultimately changed the American school system (Adedoyin & Soykan, 2020; Richmond et al., 2020; Velichová et al., 2020). However, the need for differentiation, student motivation, and engagement has not changed although the mode of instruction has (Chasteen, 2017; Dawson & McGill, 2017). While teachers in the face-to-face environment found differentiating and challenging gifted and talented students to be difficult, online instruction has added to the demand (Tomlinson, 2015, 2018).

It is important for gifted students to have confidence in their abilities as well as be provided with opportunities that challenge them to stretch their capabilities within the inclusive classroom (O'Leary et al., 2020; Tomlinson, 2015, 2018). Even though gifted students often demonstrate higher self-efficacy and intrinsic motivation when compared to their peers, without the appropriate level of challenge, they are at a higher risk to achieve below their capabilities (Horak & Galluzzo, 2017; McCoach & Siegle, 2003; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). In the face-to-face environment, gifted and talented students will often execute the behaviors necessary to perform and assess well while demonstrating the ability to exert control over their motivation, behavior, and social environment (Bandura, 1986, 1997; Maryland State Department of Education & Maryland Advisory Council on Gifted and Talented Education, 2020; Ritchotte et al., 2014; Sternberg & Davidson, 2005; Tomlinson et al., 2003). Yet, when the format in receiving the instruction shifts to online, these students are at an increased risk for underachieving; even if they have historically demonstrated high self-efficacy and motivation in the face-to-face environment (Horak & Galluzzo, 2017;

Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). Teachers need to understand that to develop this motivation, gifted students need stability, support, and the appropriate level of challenge to meet their cognitive demands (Smedsrud, 2018). This requires teachers to have a higher self-efficacy. Current research on teacher efficacy shows that educators with a higher sense of efficacy exhibit behaviors associated with effective teaching toward a given population of learners and they are more likely to engage in differentiated instructional practices that are known to improve learning (Dixon et al., 2014). Additionally, students' self-efficacy and intrinsic motivation increase when students perceive their teachers' motivational behaviors positively, and they will improve their performance (Strati et al., 2017; You et al., 2016). Even though students do not always perceive increased challenge in the general classroom, if the teacher demonstrates a higher competency in teaching gifted students, students can increase their self-efficacy and achievement (Mofield & Parker Peters, 2018; Strati et al., 2017; You et al., 2016).

Given the fact that gifted and talented students demonstrate both the need to achieve and self-efficacy, the middle school years are a critical stage for the onset of underachievement (Horak & Galluzzo, 2017; McClelland, 1988; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). In 2018 (Fu-Yun et al., 2018), teachers report that 80% of middle school students are not adequately motivated to learn when receiving face-to-face instruction. Additionally, online instruction has increased the decline in students' intrinsic and extrinsic motivation to learn due to distractions at home, social-emotional well-being, lack of engagement, and feedback required for learning (Adedoyin & Soykan, 2020; American Psychological Association, 2020; Chen & Tseng, 2012; Dawson & McGill, 2017; Sepulveda-Escobar & Morrison, 2020; Velichová et al., 2020). However, when students are adequately motivated,

they tend to approach challenging tasks fervently and will persist through the challenge to achieve (Liu et al., 2011; Strati et al., 2017). Research also suggests that instructional context affects students' intrinsic motivation and correlates with academic achievement (Liu et al., 2011; Mofield & Parker Peters, 2018; Strati et al., 2017). This further demonstrates the importance of challenging instructional materials and the provision of student choice in the promotion of perceived autonomy and self-determination necessary to increase intrinsic motivation and academic achievement, especially during the middle school years (Blackburn, 2018; Callahan et al., 2015; Tomlinson, 2018; Vesely et al., 2007).

Problem Statement

The problem is that gifted students are not being challenged in the virtual environment. It is estimated that 15.8% children are enrolled in gifted and talented programs in Maryland (National Center for Education Statistics, 2018). Currently, most of these students spend the majority of the instructional time in general education classrooms where there exists a wide range of cognitive abilities (Tomlinson, 2015, 2018). It is the responsibility of the general educator to provide appropriate learning experiences and challenge the gifted learner without neglecting the other abilities present (Tomlinson, 2015, 2018). Within the face-to-face environment, research suggests that teachers find it difficult to differentiate their classrooms to meet the needs of struggling students, yet they have not even begun to plan to help gifted learners achieve their academic potential (Tomlinson, 2015; Godor, 2019). Additionally, with the recent pandemic, remote teaching has only increased this challenge as many students are receiving instruction virtually. Additionally, gifted students tend to test well, perform well academically, are intrinsically motivated, do not usually pose behavior problems, and teachers do not perceive their needs through academic observations alone (Bennett-Rappell & Northcote,

2016; McCoach & Siegle, 2003; Ogurlu, 2020; Rodriquez, 2016). Additionally, virtual programming has been used to accel the gifted learner, but they are not always adequately challenged using this platform (Godor, 2019; Steenbergen-Hu et al., 2020; Tomlinson, 2015, 2018; Young et al., 2019). This increases the risk for these students to become disengaged and do the minimum to succeed (Steenbergen-Hu et al., 2020; Young et al., 2019).

One research limitation that has led to this issue is the lack of teacher efficacy in promoting academic challenges in the classroom (Bennett-Rappell & Northcote, 2016; Ogurlu, 2020; Rodriquez, 2016). Many previous qualitative studies on teacher efficacy are limited because data was collected through self-reports (Heyder et al., 2018). Additionally, recent qualitative research has investigated the perception and practice of educators when teaching gifted students but does not describe their experiences in terms of rigor in the virtual environment (Young et al., 2019). However, the problem remains that gifted and talented students are not challenged in the integrated classroom and shifting to online instruction has further increased this problem (Godor, 2019; Steenbergen-Hu et al., 2020; Tomlinson, 2015, 2018; Young et al., 2019).

Purpose Statement

The purpose of this transcendental phenomenological study was to explicate the lived experiences of core academic middle school teachers with differentiating instruction and challenging the gifted learner in rural southern Maryland. Academic challenge or rigor is generally defined as learning experiences that are academically, intellectually, and personally challenging (Blackburn, 2018; "Rigor definition", 2014). Additionally, gifted students are generally characterized as students who produce evidence of intellectual, creative, artistic, or leadership achievement capability above their peers (Wrights Law, 2015). Furthermore, core

academic subjects which contribute to a well-rounded education, as defined by Every Student Succeeds Act of 2015, are generally defined as English, math, science, social studies, fine arts, foreign language, health, and physical education (ESSA, 2015). Lastly, differentiation is defined as the process of presenting and assessing the curriculum standards through integrating the instructional outcomes as coherent learning experiences that engage students connects to the world around them (Tomlinson, 2015).

The main theories that guided this research were the self-efficacy theory defined by Bandura (1986, 1997) and the achievement-motivation theory described by McClelland (1988). The Self-efficacy theory explains the differences in the number of effort students expend on learning activities and the social cognition that emphasizes the role of observational learning and social experience that are perceived differently in a virtual environment that must be considered by the teacher when developing differential lessons and activities for learning to take place (Bandura, 1986, 1997). This theory also addresses the relationship between the sense of efficacy and performance. McClelland's (1988) achievement-motivation theory addresses the need for gifted students to achieve, and for differentiation within the classroom to properly challenge these students.

Significance of the Study

This study may provide significant knowledge about the experiences of middle school core academic teachers differentiating instruction and assessment to challenge gifted students in rural southern Maryland. This knowledge may be useful for improving the educational experiences of gifted learners. The three areas in which this study is hoped to prove significant to educational research: empirically, theoretically, and practically.

Empirical Significance

The significance of this study provides an understanding of the phenomenon with an emphasis on differentiated instruction to challenge the gifted learner (Bennett-Rappell & Northcote, 2016; Ogurlu, 2020; Rodriquez, 2016). While the concept of diversity in learning abilities is not new in the educational arena, the area of differentiation for gifted learners in the virtual platform has not been thoroughly researched (Bennett-Rappell & Northcote, 2016; Rodriquez, 2016; Tomlinson 2015; Tomlinson et al., 2003; Taylor, 2016). Little research has been conducted on how gifted middle school students respond to the virtual platform, and the necessary academic rigor to prevent underachievement while engaged in online learning (Bennett-Rappell & Northcote, 2016; Cakir, 2014; Rodriquez, 2016; Tomlinson 2015; Tomlinson et al., 2003; Taylor, 2016). However, evidence suggests that gifted and talented students require a curriculum that is both rigorous and challenging despite the instructional platform (Bennett-Rappell & Northcote, 2016; Ogurlu, 2020; Rodriquez, 2016). With the transition to virtual instruction, gifted and talented students pose a greater risk for underachievement due to the lack of challenge presented in this environment (Velichová et al., 2020). Therefore, understanding the phenomena will contribute to the knowledge available. This study informs the body of research concerning teachers' sense of efficacy in working with gifted students and how differentiating virtual lessons impact their experiences. Through an understanding of the phenomenon, it is expected that gifted students, teachers, administrators, and school programs will benefit through an improvement in educational opportunities both in and out of the classroom.

Theoretical Significance

This study provides support for the application of self-efficacy theory (Bandura, 1986, 1997) in research as it relates to the education and teachers' efficacy to adequately challenge the

gifted learner (Bennett-Rappell & Northcote, 2016; Ogurlu, 2020; Rodriquez, 2016). Although virtual instruction has posed many challenges, an understanding of the factors that contribute to the classroom teachers' efficacy to adequately differentiate the curriculum to promote critical thinking and to extend student learning is important to understanding how gifted students respond to digital learning (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020; Winebrenner, 2012). An understanding of both the self-efficacy theory (Bandura, 1986, 1997; Barbier et al., 2019; Merriman, 2012) and the achievement-motivation theory (Elbeheri et al., 2018; McClelland, 1988) provide a conceptual model describing how the gifted student learns and how the environment plays a role in how they respond to instruction. Additionally, differentiation is necessary within the virtual instructional model to properly challenge gifted and talented students (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020; Winebrenner, 2012).

This study provides stronger support for the application of this theoretical framework to the study of the experiences of teaching gifted learners. Additionally, it is hoped that this study will provide insights into the application of the achievement-motivation theory (McClelland, 1988) and teacher efficacy (Bandura, 1986, 1997; Elbeheri et al., 2018) as it pertains to the teaching of the gifted learner to inform teacher preparation programs and provide professional development aimed at increasing academic rigor to properly challenge this population of learners.

Practical Significance

This research study provides practical significance by informing the practices of administrators and teacher preparation programs in providing pre-and in-service teachers with the support needed to identify, challenge, effectively assess gifted middle students (Matheis et

al., 2015). Another potential contribution of this study is providing strategies for challenging the gifted learner (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020; Winebrenner, 2012). The need to address time in the teacher day for collaboration is supported by this study and provides administrators with an understanding of the importance of shared planning times for classroom and special education teachers. Thus, this study is relevant to all participants in the education system, especially those responsible for providing gifted and talented instruction.

By capturing the shared experiences of teachers in this school district and their challenges differentiating the instruction to not only meet the needs of all students in the classroom but also excelling gifted students, school districts can begin to understand the phenomenon and find possible solutions for accelerating the gifted learner. While this study is limited to a rural school district in Maryland, other districts can learn from the challenges presented by the general educator.

Research Questions

To address the problem, it is important to explore the experiences of middle school core academic teachers who provide content knowledge to the gifted learner. One central question and two sub-questions guided this research. The following is a detailed description of the research questions.

Central Research Question

What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?

The goal of this question is to elicit the experiences of participants in the phenomenon. Research suggests that there is a disconnection between practice and pedagogy among teachers

when it comes to differentiating instruction to meet the diversity of needs while providing an engaging environment in which students are eager to learn across cognitive levels (Freedberg et al., 2019; Liu et al., 2011; Manuel & Freiman, 2017; Mikropoulos & Natsis, 2011; Mulrine, 2007). The high degree of diversity, wide range of skill and cognitive levels integrated into modern classrooms makes it merely impossible for educators, to meet the unique needs of individual students while promoting rigor and challenge (Tomlinson, 2015; Tournaki, 2003). Understanding the teachers' perspectives of challenging gifted and talented students in the general education classroom when instruction is differentiated through a virtual platform sheds light on how to increase engagement and rigor in the virtual classroom (Chasteen, 2017; Dawson & McGill, 2017; Potts, 2019). To ensure that gifted students are being provided equitable access to the curriculum, the experiences of teachers in providing differentiated instruction must be understood.

Sub-Question One

How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually?

Bandura (1986) defined self-efficacy as the capacity to execute behaviors necessary to produce specific performance attainments. In this case, do teachers feel confident to develop lessons with the appropriate level of challenge to meet their cognitive demands (Smedsrud, 2018)? Unfortunately, many general educators do not know how to properly challenge gifted students and scaffold instruction for struggling students simultaneously (Taylor, 2016; Tomlinson 2015). While teachers value professional development, administrative support, and mentoring and see them as valuable resources in the fidelity of their curriculum differentiation, they need additional support to adequately challenge the gifted learner without neglecting other

cognitive levels in the classroom (Taylor, 2016; Tomlinson, 2015). Even though the curriculum and instruction are differentiated to meet the needs of students, the appropriate level of challenge may not always be present, especially during remote learning (Potts, 2019). While virtual classrooms provide the means for individualized instruction, little research has been conducted on the success of distance learning as a means for challenging the gifted population (Gucciardi et al., 2020; Steenbergen-Hu et al., 2020; Potts, 2019). Investigating the sense of self-efficacy held by the participants may provide information regarding teaching effectiveness through a virtual platform which are linked to teacher experiences.

Sub-Question Two

How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners?

Research suggests that both in-service and pre-service teachers can hold incorrect beliefs about gifted students combining positive attributes of high intellectual ability with social, emotional, or behavioral difficulties (Akgül, 2021; Klassen & Tze, 2014; Matheis et al., 2015). Additionally, misconceptions toward gifted students influence the process of identification, programming, curriculum development, design, and instructional implementation (Akgül, 2021; Klassen & Tze, 2014; Matheis et al., 2015). However, pre-service gifted education teachers with subject-specific course work in their field at an undergraduate level show higher levels of self-efficacy teaching gifted students (Matheis et al., 2015). Understanding the beliefs about the gifted and participants' efficacy to foster students with diverse intellectual abilities may provide information regarding teaching effectiveness through a virtual platform which may be linked to teacher experiences.

Definitions

1. Asynchronous Lesson- An instructional method in which the curriculum is constantly modifiable and changing in an online format for students to complete independently. Teachers can use tracking tools to examine the time a student spends on the content and online course materials (Eriksson, 2012).
2. *Differentiation*- To modify curriculum and instruction to meet the present needs in the classroom (National Association for Gifted Children, 2020)
3. *Differentiated Instruction*- The proactive delivery of instruction that allows different learners with a variety of different needs to express learning (Tomlinson et al., 2003).
4. *Distant Learning*- The use of online and application technology to replace traditional instruction (Abakumova, Bakaeva, Grishina, & Dyakova, 2019)
5. *Educational equity*- The concept that involves equal educational opportunities and achievements for all students regardless of race, religion, ethnicity, gender, socioeconomic standing, or disability (Best & Winslow, 2015).
6. *Engagement*- A measurement of emotional, cognitive, and behavioral awareness through students' responses to items about their learning experiences and includes effort, persistence, concentration, attention, class participation (Fredricks et al., 2004)
7. *Gifted Students* – Students who possess or are capable of developing the composite of traits including the evidence of intellectual, creative, artistic, or leadership achievement and applying them to any potentially valuable area of human performance (National Association for Gifted Children, 2020).

8. *Individualized education program (IEP)*- a specialized education plan for students with disabilities that set specific goals and objectives that aim to close the educational gap (US Department of Education, 2019).
9. *Intelligence*- the display of certain abilities necessary to understand and adapt to the environment by using inherited talents and learned knowledge (Pili, 2019).
10. *Motivation*- The measurement of an individual's performance on tasks implies cognition and self-efficacy, as well as aspects associated with metacognition (Elbeheri, Reid, & Everatt, 2018).
11. *Rigor*- The Pursuit of high standards within the classroom with the appropriate level of challenge so that students can achieve conceptual understanding, procedural skill, fluency, and application with equal intensity (Blackburn, 2018)
12. *Student Response to Instructional Practices (StRIP)*- Survey that measures student response to instruction and instructional strategies for influencing engagement (DeMonbrun et al., 2017).
13. *Self-efficacy*- The capacity to execute behaviors necessary to produce specific performance attainments including the ability to exert control over one's motivation, behavior, and social environment (Bandura, 1986, 1997)
14. *Self-regulation*- the ability to sustain effort and motivation while maintaining control over negative behaviors and the thoughts that accompany those behaviors (Elbeheri, Reid, & Everatt, 2018).
15. *Synchronous Lesson*- Instruction that takes place in an online format, anywhere and anytime in a continuous process. The students are actively engaged in the online lesson with the teacher in real-time (Eriksson, 2012).

16. *Underachievement*- The occurrence of a gifted student underperforming or performing below capability (Barbier et al., 2019).
17. *Virtual Learning Environment (VLE)*- An online environment that is based on a certain pedagogical model and provides learners with experiences that would not be experienced in the physical classroom (Mikropoulos & Natsis, 2011).

Summary

Due to the increase in virtual education in public education, there is a need to study the experiences of core academic teachers at the middle school level to ensure the gifted and talented population is receiving equitable educational opportunities (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020; Winebrenner, 2012). This population, unfortunately, is often overlooked in the classroom. According to National Association for Gifted Children (2020), this population accounts for over 897,000 students in Maryland public school classrooms, however, not all gifted learners have been identified (NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020). The purpose of this transcendental phenomenological study was to describe the experiences of core academic middle school teachers with differentiating instruction to challenge the gifted learner in rural southern Maryland. The increasing use of virtual and distant learning platforms supports the purpose of this proposed study. The theoretical framework is based on Bandura's self-efficacy theory (1986, 1997) and McClelland's achievement-motivation theory (1988). These two theories explain learning experiences and interactions between the learner and the instructor while addressing the educator's efficacy in challenging gifted learners within the virtual classroom. Additionally, this theoretical framework supports the need for teachers to differentiate instruction for gifted learners and provide an adequate level of challenge

to promote critical thinking while addressing feelings of efficacy toward the task. The research reflects the experiences of teachers as they work with the gifted learner in the core content classroom virtually. Chapter Two provides the theoretical framework for this study which is based on the work of Bandura (1986, 1997) and McClelland (1988). The chapter will also provide a review of the available literature that relates to this study and addresses the gap in the literature.

CHAPTER TWO: LITERATURE REVIEW

Overview

Nationally, many gifted students do not receive an appropriately challenging curriculum and fail to reach their potential as a result. Unfortunately, educational policies focus on closing learning gaps for struggling learners while the achievement gap has been widening (Every Student Succeeds Act (ESSA), 2015; NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020; Yaluma & Tyner, 2020). This "excellence gap" is problematic, especially due to the high demand for a high-performing and highly skilled workforce, especially in the fields of math, science, and engineering (Every Student Succeeds Act (ESSA), 2015; NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020; Yaluma & Tyner, 2020). However, federal law is clear in establishing equitable access to educational opportunities in the mainstream classroom through research-based and proven methodologies (Tomlinson, 2015; Tomlinson et al., 2003). A study of the shared experiences of these teachers will aid schools in improving best practices for the education of the gifted learner to close the excellence gap and provide teachers with strategies to provide more equitable academic opportunities.

The literature review in Chapter Two will explore the theoretical frameworks for this study and is based on the social cognitive theory of Bandura (1986) and the achievement-motivation theory of McCelland (1988). Social cognitive learning theory as defined by Bandura (1986) addresses the role of self-efficacy in learning and was the primary theory guiding the research as it addresses the role of teacher efficacy in working with gifted students as an integral part of their shared experiences. Achievement-motivation theory as defined by McClelland (1988) serves as a secondary framework with a focus on approaches to challenging the gifted learner. The connection between achievement-motivation theory (McClelland, 1988) and

instructional strategies will be discussed along with the role of efficacy in planning and implementing instructional strategies. The review of the related literature will address the following key issues relevant to the phenomenon: (a) Understanding giftedness and identifying the gifted learner, (b) research on teacher sense of efficacy, (c) attitudes and beliefs teaching gifted students, (d) gifted instructional models, (e) the gap in the literature. The chapter closes with a summary of the review of the literature.

Theoretical Framework

The two theoretical frameworks that are woven into both quantitative and qualitative research concerning gifted and talented students are Bandura's (1986) social cognitive theory and McClelland's (1988) achievement-motivation theory. Both Bandura's (1986) and McClelland's (1988) theories emphasize students' motivational factors for learning by evaluating the importance of both social and cognitive aspects present in a virtual learning environment. Therefore, these theories provide a foundation for exploring for experiences of select middle school teachers in differentiating instruction to challenge the gifted learner. Working with highly able students is rooted in both cognitive and achievement paradigms. Bandura's (1986) self-efficacy theory explains the differences in the amount of effort students expend on learning activities and the social cognition that emphasizes the role of observational learning and social experience that are perceived differently in a virtual environment. This theory also evaluates the role of the teacher and their ability to provide the environment necessary to foster both the student's gifts and talents (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020). While McClelland's (1988) achievement-motivation theory supports gifted and talented students' desire for success, factors that influence student motivation include the classroom environment, task

meaningfulness, level of challenge, academic pacing, and the student's perceptions of their abilities (Karantzas, 2019; Merritt, 2016; Taylor, 2016).

Self-Efficacy Theory

The self-efficacy theory stems from Bandura's (1986) social cognitive theory which examines self-regulation as the interaction between individual perceptions of success, engagement, the environment, and feedback (Barbier et al., 2019; Merriman, 2012). Bandura's (1997) research showed a strong correlation between self-efficacy, personal belief in the capacity to perform to achieve, self-regulated behavioral changes, and social interactions. Additionally, self-efficacy reflects goals for which individuals strive to achieve. Therefore, it is the academic motivation that provides task meaning and provides individuals both the persistence and determination to stick with difficult tasks (Bandura, 1986; Barbier et al., 2019; Merriman, 2012; Ritchotte et al., 2014; Smedsrud, 2018). One's self-efficacy plays a major role in how one approaches goals, tasks, and challenges (Bandura, 1986; Merriman, 2012; Ritchotte et al., 2014; Smedsrud, 2018). People with high self-efficacy are more likely to view difficult tasks as something to be mastered rather than something to be avoided (Bandura, 1997; Barbier et al., 2019). This confidence is an important part of gifted education for both the teacher and the student. Furthermore, Bandura (1986, 1997) defined self-efficacy as the capacity to execute behaviors necessary to produce specific performance attainments including the ability to exert control over one's motivation, behavior, and social environment.

With the recent pandemic, the lack of self-efficacy and the risk for underachievement has increased, even if the individuals historically demonstrated high self-efficacy and motivation in the face-to-face environment (Cakir, 2014; Horak & Galluzzo, 2017; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020) To develop this motivation through

distant learning, gifted students need stability, support, and the appropriate level of challenge to meet their cognitive demands (Smedsrud, 2018). Most importantly, self-efficacy reflects the need to strive towards an academic connection to task meaning, persistence, and determination, especially for the gifted student (Smedsrud, 2018). Research suggests that motivation, self-efficacy, individual stress levels, and academic self-belief are critical links to intellectual ability and student performance (Piekarska, 2020; You et al., 2016). Therefore, students must engage in meaningful learning to effectively nurture self-efficacy and academic self-belief (Smedsrud, 2018). This means if the student does not find meaning in the activity or are not challenged by it, they are most likely to disengage and are at a greater risk to achieve below their ability. Therefore, if the virtual platform is not engaging, the students do not find meaning in the instruction, or they lack self-efficacy then they will most likely underachieve (Winebrenner, 2012). For this reason, Bandura (1997) incorporates self-efficacy as an integral part of learning.

Additionally, the middle school years appear to create complex processes that relate to how students engage in the classroom environment and demonstrate achievement (Barbier et al., 2019). In middle school, the student experience shapes self-efficacy, goal valuation, environmental perception, and self-regulation; all of which affect how they view achievement and task validation (Barbier et al., 2019). Further research suggests that gifted students want to feel supported and challenged in school, even if they do not always have the tools to remain motivated (Barbier et al., 2019; Taylor, 2016). Studies also suggest that students with low self-efficacy exhibited a range of self-esteem, but are not always reflective of their capabilities, strengths, and weaknesses (Barbier et al., 2019; Taylor, 2016). More importantly, students' self-efficacy, intrinsic motivation, and academic performance increase when they perceive their teachers' motivational behaviors positively (Strati et al., 2017; You et al., 2016). This means that

teacher self-efficacy plays a role in increasing student motivation, confidence, and performance. That means even if students do not perceive the challenge, but the teacher demonstrates positive motivation behaviors, then students' self-efficacy will increase (Strati et al., 2017; You et al., 2016). Additionally, if the curriculum and instruction are differentiated to meet the needs of students, the appropriate level of challenge may not always be present, especially during remote learning (Potts, 2018). Although virtual classrooms provide a platform for individualized instruction, little research has been conducted on the success of distance learning as a means for challenging the gifted population (Gucciardi et al., 2020; Steenbergen-Hu et al., 2020; Potts, 2019).

In addition to student self-efficacy, teachers need to demonstrate self-efficacy when differentiating the curriculum to meet the cognitive abilities present in the inclusive classroom (VanTassel-Baska et al., 2021). Just as students' self-efficacy varies, educators also demonstrate varying self-belief in their ability to differentiate instruction for gifted learners (VanTassel-Baska et al., 2021). Furthermore, students' self-efficacy, teacher lesson preparation, the learning environment, student readiness, the range of cognitive and ability levels present, content knowledge, and pedagogical skill also contribute to the teacher's self-efficacy (VanTassel-Baska et al., 2021). While these factors are present in both the face-to-face environment and virtual learning, educators were unprepared to teach remotely due to government closures brought about by the COVID-19 virus (Richmond et al., 2020). Adding another limiting factor to teacher self-efficacy due to current teacher education requirements only focusing on the integration of technology and not the unique aspects of pedagogy associated with teaching virtually (Richmond et al., 2020). Additionally, educators are not always properly trained and equipped to work with gifted learners. This lack of teacher

preparation causes many teachers to believe they are ineffective or deficient in differentiating both instruction and assessment to meet students' needs (VanTassel-Baska et al., 2021).

The Achievement-Motivation Theory

McClelland's achievement-motivation theory explains and predicts a student's behavior and performance based on the individual's need for achievement (Elbeheri et al., 2018). Gifted and Talented students have a higher level of intrinsic motivation compared to their peers and strive for high academic achievement (Elbeheri et al., 2018). This need for achievement is a motivator that increases their self-esteem, and research suggests that these motivators are learned (Elbeheri et al., 2018). According to this theory, intrinsic motivation is influenced by challenge, curiosity, control, fantasy, and relatedness (Liu et al., 2011). Research has also documented a disconcerting decline in students' motivation to learn at school during the middle school years (Fu-Yun et al., 2018; Ritchoette et al., 2014; Strati et al., 2017; Taylor, 2016). While gifted and talented students demonstrate both the need to achieve and self-efficacy, middle school years are a critical stage for the onset of underachievement, or achieving below capability (Emerick, 1992; Horak & Galluzzo, 2017; McClelland, 1988; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). Online instruction has increased the decline in students' intrinsic and extrinsic motivation to learn due to distractions at home, social-emotional well-being, lack of engagement, and feedback required for learning (Adedoyin & Soykan, 2020; American Psychological Association, 2020; Chen & Tseng, 2012; Sepulveda-Escobar & Morrison, 2020; Velichová et al., 2020). However, proper achievement motivation allows students to approach challenging tasks fervently and demonstrate perseverance through the task until achievement is obtained (Liu, et al., 2011; Strati et al., 2017). Research also suggests that instructional context affects students' intrinsic motivation and correlates with academic achievement (Liu et al., 2011;

Strati et al., 2017). Therefore, instructional materials must provide student choices, challenge, promote perceived autonomy, and develop self-determination to increase intrinsic motivation and academic achievement, especially during the middle school years (Lui et al., 2011; Strati et al., 2017; Tomlinson, et al., 2003).

Although McClelland's (1988) achievement-motivation theory supports gifted and talented students' desire for success, the virtual classroom often lacks the level of challenge necessary to prevent gifted student academic complacency and underachievement (Adelodun, 2017; Emerick, 1992; Pots & Pots, 2017; Sawchuk & Sparks, 2020). Furthermore, the virtual environment poses personal obstacles for many students including the gifted (Almukhambetova & Hernández-Torrano, 2020; Ridgley et. al., 2020). Students not only need to be motivated and engaged in the curriculum, but they also need to be provided opportunities to grow and contribute socially which can be challenging in a virtual platform due to new stresses including perceived judgment from peers and teachers (Almukhambetova & Hernández-Torrano, 2020). Understanding all the factors that may influence the level of challenge or causes of gifted and talented underachievement in the virtual classroom provides educators with insight into how to further modify the curriculum and instruction to meet individual needs (Cakir, 2014; Ridgley et. al., 2020).

Therefore, these frameworks support the investigation of the phenomenon of the experiences of core academic subject teachers working with gifted students. The grounding of the research in these two theories may provide further insight into the application of the social cognitive theory and the achievement-motivation theory in the experiences of the participants with the phenomenon. These theories may inform the practices of teacher

education programs and ongoing professional development opportunities for gifted education and in turn, improve the quality of education for high-achieving students.

Related Literature

The push for high levels of curiosity, interest in the fields of science, math, and engineering has given gifted education more recent attention through published research geared toward understanding the importance of teaching gifted and talented students (Camcı-Erdogan, 2015; Smutny, 2002), However, on a national level, there are only three million identified gifted students which only accounts for 6% of the student population (Every Student Succeeds Act (ESSA), 2015; NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020; Yaluma & Tyner, 2020). Currently, past century researchers and theorists have attempted to refine and expand the definitions for both giftedness and intelligence (Carman, 2013; Taylor, 2016). The foundation of current definitions is based and built on Renzulli's (1978) research that broadened the definition and criteria for giftedness (Carman, 2013; Jolly, 2018; McBee & Makel, 2019; Merriman, 2012). He defined gifted and talented students as those "who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance" (National Association for Gifted Children, 2020). However, many scholars agree that this definition is not scientifically backed, and the field of psychology has attempted to broaden this term based on scientific evidence (McBee & Makel, 2019; Taylor, 2016). While empirical research will continue to scientifically understand and define giftedness and intelligence (Jolly, 2018; McBee & Makel, 2019; Merriman, 2012; Taylor, 2016), legislation has expanded the definition for giftedness to reflect the evidence in the field of education to shift the focus from identification criteria to a deeper understanding of the complexity of giftedness (National Association for Gifted Children, 2020). According to the Elementary and Secondary

Education Act of 2002 and The No Child Left Behind Act of 2002, gifted and talented students give evidence of high-performance capability. Historically, high IQ scores were a fundamental indicator of giftedness; however, recent identification includes unique abilities or talents that place these students above their peers in which students can demonstrate these capabilities intellectually, creatively, artistically, or through leadership (National Association for Gifted Children, 2020). Under IDEA these students require services or activities that are not ordinarily provided by the school where gifted programs are not established (Wrights Law, 2015). Unfortunately, under federal law schools are not mandated to provide the necessary programs or provide the necessary accommodations for these students (Zirkel, 2009). Though students who are classified as gifted have different pedagogical requirements than their peers and the curriculum must be consistent with their abilities. Yet the lack of legislation in this area is leading to a wider intelligence gap on a national scale (Horak & Galluzzo, 2017; Riley et al., 2017; National Association for Gifted Children, 2020; Tomlinson, 2018; Riley et al., 2017; Wrights Law, 2015; Zirkel, 2009).

Understanding Giftedness

However, understanding giftedness is based on three theoretical models, Renzulli's three-ring conception of giftedness, Gagné's (1985) differentiated model of giftedness and talent, and Gardner's theory of multiple intelligences. Each of these models are foundational for the development of the modern definition and identification of giftedness (Carman, 2013). While Renzulli's (1978) three-ring conception of giftedness identifies motivation through task commitment, above-average ability, and creativity, Gagné (1985, 1992) and Gardner (2000) describe the process by which giftedness includes talent (Martin, 2015). Gagné (1985, 1992) identified domains in which students demonstrate certain talents (Gagné, 1992), and Gardner

(2000) describes how these talents are expressions of an individual's intelligence. These theories attempt to conceptualize the complexity of the gifted learner with the purpose of cognizing factors that motivate these students to achieve their potential.

Renzulli's Three-Ring Conception of Giftedness

Renzulli (1978) further determined that gifted behavior occurs through the interaction of the student's abilities, motivation, and high levels of creativity (Renzulli, 1986). The National Association for Gifted Students (2020) in their "Schoolwide Enrichment Model", stated that gifted behaviors can be discovered in "certain people, at certain times, and under certain circumstances." This demonstrates the conception of giftedness as not solely based on intelligence tests, achievement, and academic aptitude. Therefore Renzulli (1978, 1986) included areas in which gifted students could express their talents. Through the three-ring model of giftedness, Renzulli (1978, 1986), focused on the identification of gifted and talented students based on the interaction between the teacher, the learner, and the curriculum (Jolly, 2018; McBee & Makel, 2019; Merriman, 2012). While this model assists in the identification of once overlooked students, it also increases flexibility in defining students' giftedness (Jolly, 2018; McBee & Makel, 2019; Merriman, 2012; Renzulli & Reis, 2009).

Currently, Renzulli's (1986) three-ring conception of giftedness is widely used in schools and educational institutions in the United States to develop gifted programs and enrichment (Reis & Renzulli, 2009). Furthermore, his model, when used for identification, recognizes gifted and talented students as those that appear to be intrinsically motivated, exhibit highly developed interests, and demonstrate abilities in particular areas (Page, 2006). This process for identifying gifted and talented students applies to cultural models of giftedness because it acknowledges the roles of creativity, task commitment, and culturally valued activities (Page, 2006). However,

while this model accounts for ability and creativity, it does not account for student interest which is vital to both motivation and success (McBee & Makel, 2019; Merriman, 2012; Page, 2006). Furthermore, Renzulli's model does not account for student exposure that inspires engagement, motivation, and the manifestation of gifts and talents (Page, 2006). On the other hand, when Renzulli's (1986) model is used in conjunction with other gifted models, educators can collect data that will support the identification of the students' untapped ability (Chaffey, 2004; Page, 2006).

Gagné's Differentiated Model of Giftedness and Talent

Extending from Renzulli's (1986) three-ring model of giftedness, Gagné (1992) argues that giftedness refers to the student's natural abilities while talent is the realization of their gifts, enhanced through intervention (Page, 2006). Unlike Runzulli's (1978) model, in 1985, Gagné developed the differentiated model of giftedness and talent in which there is a clear distinction between giftedness and talent (Gagné,1985; National Association for Gifted Children, 2020; Sternberg et al., 2010). Gagné (1985) defined giftedness as the possession and use of untrained and spontaneously expressed natural abilities called aptitudes or gifts (Gagné,1985; National Association for Gifted Children, 2020; Sternberg et al., 2010). Students who demonstrate these aptitudes in at least one domain and are above 10% of their peers are classified as gifted (Gagné,1985; National Association for Gifted Children, 2020; Sternberg et al., 2010). However, the definition of talent describes the mastery of systematically developed abilities and knowledge that places a student's achievement within the upper 10% of age-peers (Gagné,1985; National Association for Gifted Children, 2020; Sternberg et al., 2010). Gagné's (2020) model presents five aptitude domains: intellectual, creative, socio-affective, sensory-motor, and extrasensory

perception. However, the differentiated model assumes that gifts and talents are not synonymous, but addresses the limitations presented in Renzulli's (1978, 1986) model (Page, 2006.)

Furthermore, Gagné's (1985) model allows for students to extend their natural abilities through exposure through several catalysts (Page, 2006.) Through both intrapersonal and environmental interventions, students' abilities are enhanced and enriched to further develop their talents (Page, 2006.). That is because, according to Gagné (1992), students' gifts and talents are not fixed, but are further developed through intervention and experience. However, their potential remains untapped when not exposed to developmental processes and catalysts (Page, 2006). It is important to understand that all students are different and may require differing degrees and/or forms of intervention to fully develop their untapped potential (Page, 2006). Therefore, the differentiation model promotes the educational development of students' gifts and talents. Thus Gagné's (1992) Theory argues the need for classroom supports to enrich student learning experiences in the classroom to further develop the students' talents.

Gardner's Theory of Multiple Intelligences

Gardner (1995, 2000) began to develop the theory of multiple intelligences to appropriately demonstrate intelligence is not found in one central construct, but humans possess multiple forms of intelligence and have the capacity to move from one form of intelligence to another. His expanse of the topic of intelligence included emotions, morality, creativity, and leadership (Gardner, 1995; 2000). While other researchers sought to define intelligence, as a construct and a capacity to be measured, Gardner sparked the interest in the topic and began to participate in defining the measurement and uses (Brualdi Timmins, 1996; Galitis, 2007; Gardner, 1995, 2000; Sternberg et al., 2010).

Building on the research conducted by Gagné (1992), Gardner (2000) proposed his multiple intelligence theory which stated that individuals demonstrate intelligence in seven different areas. In his research, Gardner (2000) used neurophysiology to provide evidence that human intelligence is more complex than once believed. Through his research, he determined that humans demonstrate intelligence, and learn through multiple means including spatial, bodily-kinesthetic, musical, linguistic, logical-mathematical, interpersonal, intrapersonal, and spiritual (Galitis, 2007; Helding, 2009; Sternberg et al., 2010). Gardner's (1995, 2000) theory of multiple intelligences suggests that students do not have one processer of intelligence but seven, however, some areas are stronger than others (Kornhaber & Gardner, 1993). Therefore, students exhibit different areas of strength in which they could be gifted, yet some areas are weak (Galitis, 2007; Helding, 2009; Kornhaber & Gardner, 1993). It is important to strengthen student weaknesses and challenge them to move beyond the perceptions of themselves (Galitis, 2007).

Educators need to understand that individuals possess all seven bits of intelligence, however, some appear more dominant than others and assist student response to specific content or type of thinking (Gardner, 1991; Helding, 2009; Kornhaber & Gardner, 1993; Sternberg et al., 2010). In some instances, individuals may use more than one intelligence to understand a new concept at one time. Educators must not characterize the intellectual profiles of students; however, multiple intelligences can assist educators in improving student learning (Gardner, 1991; Helding, 2009; Kornhaber & Gardner, 1993; Sternberg et al., 2010). Additionally, students will automatically move from one intelligence to another. While there is not a test that can truly assess which intelligence is dominant, individuals must develop all seven (Gardner, 2000; Helding, 2009; Sternberg et al., 2010).

Gardner's (1983, 1991) research and theory, within the field of education, provides educators with the ability to have students demonstrate their learning and cognitive abilities in multiple facets. Intelligence is a bio-psychological potential to process information and individuals' specific strengths and weaknesses that can be conceptualized by multiple abilities (Gardner, 2000). This theory specifies domains in which intellectual gifts may operate and provides a valuable approach for the identification of gifted and talented students. According to Gardner's (1983, 1991) multiple intelligence theory, the assessment of students' abilities will provide areas of intellectual strengths and weaknesses that can be addressed in the classroom (Hernández-Torrano, et al., 2014). By studying the cognitive profile of students within the framework of multiple intelligence theory researchers can identify high-ability students (Hernández-Torrano, et al., 2014).

Using the Theories in Combination

After evaluating students' strengths and weaknesses based on the cognitive profile within the framework of multiple intelligence theory, educators can assign evaluative goals and objectives based on students' weaknesses (Hernández-Torrano et al., 2014). Then incorporating Gagné's (1992) theory, appropriate interventions and experiences are designed to assist students in reaching their potential (Page, 2006). The use of the differentiation model within the classroom will allow the teacher to target goals and objectives and thus promoting the educational development of students' gifts and talents. Thus Gagné's (1992) theory argues the need for classroom supports to enrich student learning experiences in the classroom to further develop the students' talents. Using Renzulli's (1978) principles when planning will ensure task meaningfulness, creativity, and value to promote the achievement of goals and objectives (Page, 2006).

In addition to the multiple intelligence theory (Gardner, 1983), Gagné's (1985) differentiated model of giftedness and talent, and Renzulli's (1978, 1986) three-ring conception of giftedness, teachers can use Bloom's taxonomy (Bloom et al., 1956) when planning. Bloom's taxonomy (Bloom et al., 1956) plays a critical role in gifted education and ensures that gifted students are engaged in problem-solving and critical thinking that challenges their thoughts and perceptions. Understanding the role these theories have in gifted education influences teacher proficiency of challenging students using these matrices to ensure higher-level cognitive processes (Galitis, 2007). These theories and models are linked to the development of definitions for intelligence and giftedness over the past century (McBee & Makel, 2019; Taylor, 2016). While the use of these theories in combination is ideal to not only identify gifted students but also ensure they are reaching their potential.

Teacher Sense of Self-Efficacy

Teacher self-efficacy determines the initiation of teaching actions that directly affect the intensity, quality, and duration of effort (Bandura, 1997; Matheis et al., 2015). Teachers' self-efficacy beliefs enable teachers to deal with challenging educational settings effectively and competently (Matheis et al., 2015). Even though there has been a lot of research conducted concerning teacher self-efficacy and the gifted learner, teachers are still finding that they are not equipped to meet the needs of diverse learners at the middle school level (Camcı-Erdogan, 2015; Dixon et al., 2014; Matheis et al., 2015). Research states teachers with a higher sense of efficacy exhibit behaviors associated with effective teaching toward gifted learners (Camcı-Erdogan, 2015; Dixon et al., 2014; Matheis et al., 2015). Conversely, those with lower senses of efficacy are more reluctant to engage in differentiated instructional practices that are known to improve learning (Camcı-Erdogan, 2015). Research suggests these differences among teachers' self-

efficacy directly affects students' success and attitudes toward school (Camcı-Erdogan, 2015; Eagly & Chaiken, 1993; Olthouse, 2013) Teacher self-efficacy, as well as their knowledge and attitude toward gifted students, might also influence the process of identifying students as well as the design of suitable educational curriculum and programming (Akgül, 2021; Olthouse, 2013). A higher self-efficacy leads to higher teaching quality, the use of more effective or innovative methods to better meet the needs of gifted students (Matheis et al., 2015). Therefore, it is important to investigate teachers' self-efficacy beliefs and attitudes and investigate their variability.

However, to increase their self-efficacy, teachers need a higher level of occupational engagement, less stressful situations, and professional competence (Matheis et al., 2015). While teachers view professional development, administrative support, and mentoring as valuable resources in the fidelity of their curriculum differentiation, teachers also need additional support to adequately challenge the gifted learner without neglecting other cognitive levels in the classroom (Taylor, 2016; Tomlinson, 2015). Educators recognize the difficulty in providing all students with access to specific learning activities that are individualized, but struggle to challenge gifted students while scaffolding instruction for struggling students simultaneously (Taylor, 2016; Tomlinson, 2015). Keeping in mind, what works best for some students does not necessarily work for others (Dixon et al., 2014).

Although teachers understand the need to scaffold instruction for struggling learners, the elements of challenge, critical thinking, student choice, and curriculum modification are difficult to incorporate into classroom instruction daily (Taylor, 2016). Moreover, these instructional elements are not independent of each other but should be grouped to maximize content and instructional development (Taylor, 2016). For example, the use of critical thinking skills

promotes challenge. Furthermore, lesson planning can make any teacher feel ill-prepared to meet the diverse needs of their students. However, teachers who have positive attitudes toward content are inclined to design a more conducive and effective classroom environment for gifted students, and consequently, students develop positive attitudes concerning the content (Camcı-Erdogan, 2015; Eagly & Chaiken, 1993; Olthouse, 2013). Therefore, it is important to understand that a teacher's self-efficacy in teaching gifted students is directly linked to their implicit theories and is likely to influence their classroom interactions (Akgül, 2021). Studies have shown that many pre-service teachers have a low self-efficacy teaching gifted students and they perceive themselves to be unprepared to provide adequate educational provision for the gifted. Additionally, teachers with low self-efficacy toward teaching gifted students believe that they do not know how to foster and handle the students successfully. Therefore, fostering the adequate inclusion of gifted students in mixed-ability classes involves the strengthening of teachers' self-efficacy (Akgül, 2021, Camcı-Erdogan, 2015).

Attitudes and Beliefs Teaching Gifted Students

Opposing ideas, approaches, and policies in gifted education result in contradictory curriculum models and instruction (VanTassel-Baska, 2018). Additionally, the various definitions and identification processes of giftedness throughout the nation result in variations of how gifted programs are implemented (Callahan et al., 2015; Davis & Forbes, 2016; McIntire, 2017; NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020). These contradictions can compound the attitudes and beliefs that classroom teachers hold regarding giftedness (Olthouse, 2013; Schroth, 2007; Szymanski & Shaff, 2013). Inconsistencies with conceptions of giftedness can lead to problems with how giftedness influences pedagogical decisions (Akgül, 2021). Also, common myths like, "gifted children will make it on their own without a special

provision," is detrimental to the development of programs and professional development that will close the achievement gap (Leavitt & Geake, 2009).

Currently, unless students have an IEP, teachers are not required by law to set individual student goals and objectives to track and monitor gifted students' progress. However, some states provide students who have qualified for gifted services with an IEP (NATIONAL ASSOCIATION FOR GIFTED CHILDREN, 2020; Zirkel, 2009). Under IDEA, gifted students who require services or activities that are not ordinarily provided by the school are entitled to receive push-in or pull-out services like students with IEPs. Unfortunately, these services only occur in schools where gifted programs are established and there is a full-time employed gifted and talented teacher (National Association For Gifted Children, 2020; Wrights Law, 2015). Under federal law, schools are not mandated to provide programs, educator support staff, or the necessary accommodations for gifted students (National Association For Gifted Children, 2020; Wrights Law, 2015; Zirkel, 2009). Instead, the general educator is responsible for accommodating the pedagogical needs of these students. However, in some instances, educators are not made aware of which students qualify for gifted and talented services and supports in order to modify the curriculum and instruction so that it is consistent with their abilities (Lui et al., 2011; Strati et al., 2017; Tomlinson, et al., 2003). In some instances, after teachers are made aware of identified learners, they are compelled to offer specific provisions to extend learning opportunities to their gifted students in the classroom (Leavitt & Geake, 2009). More cases than not, many gifted students are not receiving these extension opportunities, but are receiving the same instruction as their peers (Horak & Galluzzo, 2017; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu, et al., 2020; Smutny, 2002).

Additionally, many educators, legislators, and stakeholders believe that intelligence cannot be improved, and gifted students do not require additional support to succeed (Jolly, 2018; Karantzas, 2019; Merriman, 2012; Taylor, 2016; Tomlinson, et al., 2003). These misconceptions only widen the intellectual gap and inhibit gifted and talented students from reaching their potential and developing positive academic self-efficacy. Gifted and talented students want to be challenged, but teachers do not always know how to provide the needed rigor (Dixon et al., 2014; Kanevsky, 2011). Without providing opportunities for cognitive productive struggle, students cannot truly learn rigor, determination, and perseverance (Lynch et al., 2018). Instead, teachers through differentiating their curriculum can design assignment extension opportunities and projects intentionally for gifted students to expand their learning (Han et al., 2014; Hmelo-Silver, 2004; Howard, 2002; Karademir, 2016; Licht, 2014; Leavitt & Geake, 2009).

It is also important to understand the level of challenge is based on the student's ability to understand new concepts at a faster pace coupled with the ability to retain and process the curriculum (Taylor, 2016). Gifted students often do not require repetition of instruction and learn at a faster pace compared to their peers (Karantzas, 2019). Therefore, these students require an accelerated curriculum with less reiteration of the content and time spent practicing concepts (Karantzas, 2019; Taylor, 2016). By planning lessons that include critical thinking, challenging learning activities, and opportunities to work at their own pace, educators can accommodate the unique needs of gifted and talented students in the inclusive classroom (Karantzas, 2019; O'Leary et al., 2020; Taylor, 2016). A study conducted by Kanevsky (2011) concluded positive student opinions concerning differentiation practices that include challenge and self-pacing. However, the use of self-pacing should not be supplemented all the time and educators should

take into consideration that gifted students do not always require faster-paced instruction (Shore & Delcourt, 1996; Taylor, 2016; Tomlinson, 2015, 2018). Additionally, the level of challenge should be based on specific individual needs (Tomlinson et al., 2003). However, supplementing instruction with opportunities for students to self-pace, engage in challenging activities, think critically will promote student engagement and motivation (Karantzas, 2019; Taylor, 2016). Therefore, understanding the participants' definition and vocabulary to discuss giftedness and their understanding of the needs of gifted students as it pertains to developing differentiated lessons was important to investigate. It is only when teachers can make their beliefs explicit relating to pedagogical strategies can they begin to highlight their understanding of giftedness and reflect on classroom practices (Barbier et al., 2022).

Gifted Instructional Models

To appropriately differentiate the curriculum and instruction, teachers need to know not only the students who have learning disabilities but also those that are classified as gifted (Cooper et al., 2004; Heyder et al., 2018; Silverman & Gilman, 2020). Approximately 90% of the teachers currently associate high achievement with giftedness (Heyder et al., 2018). Due to this misconception, teachers exhibit difficulties identifying gifted underachievers and tend to recommend high-achieving students with average intelligence for gifted identification (Heyder et al., 2018; Silverman & Gilman, 2020). Therefore, teachers must increase their competency to identify giftedness (Heyder et al., 2018). Additionally, teachers need to know students' intelligence test scores as well as other criteria rooted in evidence-based knowledge concerning giftedness and achievement to properly identify these students (Heyder et al., 2018; Silverman & Gilman, 2020).

Evidence-based criteria include Gardner's (1983, 1991, 2000) research and theory, within the field of education, which provides educators with the ability to have students demonstrate their learning and cognitive abilities in multiple facets. Gardner defined intelligence as a bio-psychological potential to process information and individuals' specific strengths and weaknesses that can be conceptualized by multiple abilities (Gardner, 2000). This theory specifies domains in which intellectual gifts may operate and provides a valuable approach for the identification of gifted and talented students. According to Gardner's (2000) multiple intelligence theory, the assessment of students' abilities provides areas of intellectual strengths and weaknesses that can be addressed in the classroom (Hernández-Torrano et al., 2014). By studying the cognitive profile of students within the framework of multiple intelligence theory educators can disseminate between high-achieving and high-ability students (Hernández-Torrano et al., 2014).

Historically, assessments have provided evidence of learning progress, and are useful tools for planning, curriculum development, programming, and the identification of gifted students (Hernández-Torrano et al., 2014; Hodges et al., 2018). Currently, traditional methods of identification such as IQ and standardized achievement tests may not identify all gifted and talented students. Other assessments such as nonverbal tests, student portfolios, affective checklists, and other forms of nontraditional assessment may provide a means of identifying overlooked potential (Hodges et al., 2018). Current theories of intelligence and giftedness emphasize the need for assessments to test the multiple cognitive abilities to reach success (Gubbels et al., 2018). Therefore, the development of alternative assessment tools is an important step in recognizing the needs of gifted students, as well as, creating a diverse range of assessment instruments and methods that increase the usefulness of these instruments (Cao et al., 2017). The

development of these tools will not only increase the identification of minority gifted students but will also prevent gifted underachievement.

The modern classroom demands that students are challenged, engaged, and invested in the learning process as it should prepare them for the future (Howley et al., 2009; Gutek, 2011; Kidman, 2019). When gifted students are engaged in rigorous and challenging curricula that match their cognitive and creative abilities, they do not perceive the challenge (Horak & Galluzzo, 2017). Additionally, a student-centered curriculum model that differentiates the lessons to cater to the students' needs is not only effective but is well-received (Horak & Galluzzo, 2017). Differentiation allows educators to vary the level of challenge while providing the freedom of choice, meaning, and learning objectives (Horak & Galluzzo, 2017). Additionally, when compared to traditional instructional approaches, student-centered approaches improve students' self-efficacy, critical thinking, and problem-solving skills (Gangwar, 2017). Furthermore, gifted students found that the student-centered approaches to learning provide an enriched learning environment, flexibility, and support their learning perceptions (Horak & Galluzzo, 2017). Even though gifted students are placed in general education classrooms and are not always provided instruction that meets their needs, by using a student-centered model, teachers can differentiate the instruction to enhance the learning for gifted learners.

Using differentiation, educators have the ability and flexibility to modify the curriculum for all students to experience continuous growth and intellectual progress without neglecting the cognitive levels present in the mainstream classroom (Karantzas, 2019; Merriman, 2012; Taylor, 2016; Tomlinson et al., 2003). This instructional model provides teachers with the ability to offer different paths to understanding content, process, and products that are appropriate for student's

strengths, interests, and learning styles (Dixon et al., 2014) Furthermore, research has shown that by using a student-centered approach, teachers can enrich classroom instruction by differentiating the instruction to meet their needs (Dixon et al., 2014; Haley, 2001). Differentiated instruction does require the development of lesson plans and alternative assessments that utilize a variety of planning tools, including background materials that would allow all students to access the curriculum by using their areas of cognitive strengths (Haley, 2001). However, this model requires teachers to plan learning experiences at a high level of challenge while providing the appropriate scaffolding to support the variety of learners in the classroom (Tomlinson, 2015). There are other implications of how academic achievement and motivation are increased through a student-centered environment, but most importantly, academically responsive instruction targets gifted and talented students (Tomlinson et al., 2003). According to research, current school reforms have required teachers to adjust their instruction to ensure all students have equity in access to high-quality learning, and teachers must differentiate instruction to meet the diverse needs of the students (Tomlinson, 2015; Tomlinson et al., 2003).

While there exists a wide variance of learning abilities, readiness, interests, and learning preferences found in the general education classroom, teachers feel that it is difficult to address all student needs for curriculum access (Tomlinson, 2015). Effective classroom practices need to include elements of curricular differentiation and an instructional design that is individualized for the various levels of readiness, interests, and learning preferences (Godor, 2019). However, due to legislation, teachers feel more comfortable focusing on scaffolding the instruction to meet the academic needs of the low-leveled learners, and often do not know how to address the needs of the gifted and talented students (Tomlinson et al., 2003). There must be an increase in teacher competency in differentiating instruction to challenge gifted students. Unfortunately, the lack of

challenge present in the classroom is dependent on teachers' perceptions of their ability to differentiate instruction to include rigorous and challenging lessons based on the students' learning preferences (Tomlinson et al., 2003). Additionally, there is a need to increase teacher proficiency in modifying the curriculum and instruction to address the needs of gifted students without neglecting other students in the classroom (Tomlinson, 2015).

Differentiation Framework

There needs to be a shift and adjustments made to current classroom practices to meet the gifted students' level of knowledge, understanding, and skill development (Callahan et al., 2015; Tomlinson et al., 2003). The use of effective instructional strategies and the integration of advanced curricula will foster gifted and talented students' ability to learn at a rapid pace, and develop content depth and complexity (Callahan et al., 2015). While both the schoolwide enrichment model (Reis & Renzulli, 2009; Renzulli, 1997, 2005, 2012; Renzulli & Reis, 1994, 2012) and accelerated programs enhance student learning, these services are available to all students (Callahan et al., 2015). Since the majority of gifted and talented placement falls in the general education classroom, educators must understand that gifted and talented students often do not require repetition of the content and learn at a faster pace (Karantzas, 2019). Therefore, the curriculum must be differentiated to accommodate these students and prevent boredom (Callahan et al., 2015; Karantzas, 2019; Tomlinson et al., 2003). Differentiated instruction is a research-based model that allows educators to provide the appropriate access to the curriculum for a diverse group of learners (Tomlinson, 2015, 2018; Tomlinson et al., 2003). By focusing attention on students varying needs while planning, educators can deliver high-quality instruction that promotes achievement for all learners, not just the gifted (Tomlinson, 2015).

Gifted students need to be empowered to take control of their learning through discovering the answers to the problems they face and usually perform better through indirect instruction (Horak & Galluzzo, 2017; Merriman, 2012). However, it is important to understand individual strengths and weaknesses through both formative and summative assessments to develop individual goals and objectives that must be addressed through the curriculum and instruction (Tomlinson, 2015). Therefore, educators must plan for learning experiences that have a high level of challenge while providing scaffolding to support the success of all students depending on their strengths and weaknesses (Tomlinson, 2015). Additionally, teachers should plan for lesson extensions that will further challenge gifted learners in a meaningful manner (Tomlinson, 2015). During instruction, educators should provide opportunities both for whole class, individual and small group work to make the instruction more personalized as well as address individual goals that promote academic growth (Tomlinson, 2015).

However, the time to plan differentiated lessons and strategize with co-teachers and specialists about additional support for students is limited (Collinson & Cook, 2001; Merritt, 2016). While teachers feel planning time is limited, the conceptual framework provides a lesson planning structure to maximize planning time (Merritt, 2016; Tomlinson, 2015). This framework is the foundation of instructional planning that includes clarity on the most important knowledge and skills students demonstrate at the end of the lesson (Tomlinson, 2015). By narrowing down the most important skills and concepts, educators can plan coursework that focuses students on understanding the content, challenging the depth of content knowledge, and the transferability of learning (Tomlinson, 2015).

The Gap in the Literature

In 2020 (Adedoyin & Soykan, 2020), the COVID-19 pandemic forced many schools to change their instructional practices. For many students, face-to-face instruction transformed into a virtual environment as students were forced to learn from home (Sepulveda-Escobar & Morrison, 2020; Sweetman, 2021). Teachers, who only taught in the in-person environment, were forced to create both engaging synchronous and asynchronous lessons that were equivalent to in-person experiences (Sweetman, 2021). Despite this forceful shift, educators understood that it is important to improve student learning experiences no matter the platform of instruction given (Sepulveda-Escobar & Morrison, 2020; Sweetman, 2021). However, prior to the pandemic, teachers were already challenged to meet the diverse needs presented in the integrated classroom (Howley et al., 2009; Tomlinson, 2015; Tournaki, 2003).

The virtual learning environment describes the methods in which course materials and instruction are delivered through computer-mediated communications software (Potts, 2019). Additionally, the virtual classroom environment usually features in-district e-mail, video conferencing tools, and class homepages that house discussion boards, assignments, assessments, multimedia resources, file upload areas, calendars, and a navigable interface (Potts, 2019). Through this online classroom space, curriculum and instruction can be delivered in both synchronous and asynchronous formats (Velichová et al., 2020). More importantly, teachers play an essential role in online instruction including the means of content delivery through technological means, the organization and management of teaching and learning, and the communication with learners (Velichová et al., 2020). Successful virtual instruction is learner-centered and allows for greater student engagement (Velichová et al., 2020). However, the virtual environment has its challenges including promoting student engagement and declining intrinsic and extrinsic motivation to learn due to distractions at home, social-

emotional well-being, lack of engagement, and feedback required for learning (Adedoyin & Soykan, 2020; American Psychological Association, 2020; Chen & Tseng, 2012; Sepulveda-Escobar & Morrison, 2020; Velichová et al., 2020). While students prefer frequent interactions with classmates and the teacher during online instruction, the virtual environment lacks a variety of social opportunities that promote student engagement and motivation (Velichová et al., 2020).

Therefore, the recent pandemic has forced a shift in content delivery to virtual instruction, and gifted and talented students pose a greater risk for underachievement if instruction lacks challenge and task meaningfulness (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020) . It is important to understand that this change in the classroom environment caused students to achieve below their capabilities even if they have historically demonstrated high self-efficacy and motivation in the face-to-face environment (Horak & Galluzzo, 2017; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020). Teachers need to understand their role in promoting student self-efficacy and motivation, by ensuring the classroom environment provides stability, support, and the appropriate level of challenge to meet their cognitive needs (Smedsrud, 2018). Moreover, students' self-efficacy and intrinsic motivation increase when students perceive their teachers' motivational behaviors positively and improve their performance (Strati et al., 2017; You et al., 2016). Studies show that if the teacher demonstrates positive motivation behaviors, students are more likely to demonstrate higher self-efficacy and achievement (Strati et al., 2017; You et al., 2016).

While both digital and distant learning has been around for several years, the pandemic has caused many teachers to change the method in which they deliver instruction which may cause a variance in teacher self-efficacy and positive motivation behaviors (Adedoyin & Soykan, 2020; Richmond et al., 2020; Velichová et al., 2020). Additionally, this

shift exposed many instructional challenges (Adedoyin & Soykan, 2020; Richmond et al., 2020; Velichová et al., 2020). Unfortunately, teacher self-efficacy towards planning synchronous and asynchronous lessons limit the amount of instructional differentiation (Sweetman, 2021). Additionally, these educators experienced a learning curve as they developed engaging lessons that were equivalent to or improved the learning experiences taught face-to-face (Sepulveda-Escobar & Morrison, 2020; Sweetman, 2021). Before the pandemic, teachers were already challenged to meet the diverse needs presented in the integrated classroom (Howley et al., 2009; Tomlinson, 2015; Tournaki, 2003), however, the virtual learning environment provides new methods to integrate the curriculum with engaging and challenging experiences that can further enhance instruction (Sweetman, 2021).

The virtual learning environment provides ways to integrate the curriculum with engaging and challenging experiences that can improve both remote learning and in-person instruction for gifted students (Sweetman, 2021). However, the shared experiences among teachers using differentiated instruction through a remote learning platform to challenge the gifted population has not been explored. While there has been previous quantitative research that concludes and/or endorses differentiated instruction to excel all students in the face-to-face instructional environment, very little qualitative research has been conducted concerning virtual learning (Freedberg et al., 2019; Liu et al., 2011; Manuel & Freiman, 2017; Mikropoulos & Natsis, 2011; Mulrine, 2007). Building and benefiting from these existing studies and theories, it is important to understand what works in gifted education, especially in the virtual classroom environment (Callahan et al., 2015). Both the role of online distant learning and the long-term impacts of virtual learning are unknown and are of great interest to the field of education. The potential for virtual classrooms to meet the needs of gifted students has made online learning

important to investigate. This transcendental phenomenology sought to explicate the lived experiences among teachers to improve instruction in the virtual inclusive classroom in terms of curricular rigor and level of challenge present. Furthermore, this information can be used by educators to either improve online gifted education or discover new opportunities for gifted learners.

The phenomenon that exists within the Maryland Public School System, regarding the transition to virtual instruction, has placed gifted and talented students at a greater risk for underachievement. This is primarily due to the lack of challenge presented in the inclusive classroom. The purpose of this transcendental phenomenological study was to elucidate teachers' experiences challenging gifted and talented middle school students to prevent underachievement during distant learning. While federal law recognizes that gifted and talented students require services or activities that are not ordinarily provided by the school system (National Association For Gifted Children, 2015; Wright's Law, 2015), Maryland Public Schools does not recognize gifted and talented student accommodations, except for twice-exceptional students who hold an IEP, during the regular school hours. Unfortunately, under federal law schools are not mandated to provide the necessary programs or provide the necessary accommodations for these students (National Association For Gifted Children, 2020; Zirkel, 2009). Additionally, provided programming and gifted and talented enrichment services are held after school hours. These programs, including enrichment opportunities, help these students excel both socially and academically. While in school honors classes and accelerated classes are offered, they are not limited to just the gifted population. Gifted and talented students, despite being categorized as exceptional, require services not offered by the school district to fully develop social, cognitive, and leadership capabilities (No Child Left Behind Act of 2002,

Title IX, Part A, Section 9101(22), p. 544). Recognizing this, the state of Maryland has enacted COMAR, 13A.04.07 (Maryland State Department of Education, 2019). This law directs local school districts with the course necessary for identifying gifted and talented students, developing, and implementing gifted and talented programs and services essential for these students to reach their full potential. Prior to the COVID-19 pandemic, schools were allowed to instate liaisons or certified gifted and talented specialists to begin working towards state compliancy under COMAR (Maryland State Department of Education, 2019). As of September 1, 2019, each school district in the state of Maryland must report their consolidation of Every Student Succeeds Act (ESSA) to ensure gifted and talented students are receiving the necessary services (Maryland State Department of Education, 2019). However, to be compliant with this law, schools must provide afterschool enrichment activities in the areas in which they use to identify gifted and talented students, usually mathematics and English language arts (Maryland State Department of Education, 2019).

However, students who are classified as gifted have different pedagogical needs and the curriculum must be consistent with their abilities, but these needs are not always met in the mainstream classroom (Tomlinson, 2015). More importantly, all students have the right to learn and achieve their potential, and the educational system should provide gifted students with that opportunity (Srinivasan, 2021). With the understanding that diverse learning styles exist in the classroom, teachers must create an environment that provides all students with unique opportunities for success which is often a challenge using a virtual platform (Tomlinson, 2015).

Current issues in gifted and talented education suggest that when gifted students lack engagement and challenge, they achieve below their potential. Even if gifted students possess adequate self-regulation skills and are intrinsically motivated to achieve academic success.

Additionally, self-efficacy and motivation do not always indicate students are reaching their potential (Ritchotte et al., 2014). However, by differentiating the curriculum, educators can vary the level of challenge to ensure students are navigating through the learning processes and striving to reach their potential. Furthermore, the shared experiences among educators concerning advancing gifted and talented students without neglecting other students will provide the local school district insight into the current problem and develop possible solutions to provide equitable instruction for all students. Therefore, this current study demonstrates a high probability that curriculum differentiation has a positive effect on challenging gifted students using the virtual platform and will provide insight into teacher self-efficacy and the delivery of instruction using these methods.

Summary

In summary, the literature addresses what is known about the phenomenon of teaching gifted and talented students. Both Bandura's (1986, 1997) self-efficacy theory and McClelland's (1988) achievement-motivation theory have laid the foundation in gifted and talented research. Both Bandura's (1986) and McClelland's (1988) theories emphasize vital elements in the curriculum and instruction development for gifted students. Bandura's (1986) self-efficacy theory explains how teachers' self-perceptions could alter the effectiveness of the lesson. The perceived differences among teachers can directly affect the amount of effort students expend on learning activities. Additionally, McClelland's (1988) achievement-motivation Theory explains how gifted students perceive success differently in a virtual environment.

While gifted and talented individuals exhibit evidence of intellectual, creative, artistic, or leadership achievement capability that is above their peers, many states, including Maryland, do not provide push in and pull-out services during school hours, even if the gifted student was

identified in elementary school (Wrights Law, 2015). IDEA (Section 1481) does recognize the need for services or enrichment opportunities that are not ordinarily provided by general education. While not all schools have developed enrichment programs, it is up to the individual teacher to ensure these students are academically challenged and are motivated in the inclusive classroom (Tomlinson, 2018). Studies suggest that when the curriculum and instruction are differentiated to meet the needs of gifted students, engagement increases (Riley et al., 2017). On the other hand, if students are not challenged and supported through a rigorous curriculum, students will lose interest in school (Young et al., 2019).

Current research has explored teacher sense of efficacy working with gifted and talented students, as well as, their attitudes and beliefs, which are linked to teacher expertise and teaching practices (Akgül, 2021, Camcı-Erdogan, 2015; Olthouse, 2013). Effective strategies and practices for teaching gifted students have been supported by the research to increase achievement in integrated classrooms where gifted and talented students are present and should be considered when studying the experiences of teachers working with this population (Callahan et al., 2015; Collinson & Cook, 2001; Karantzas, 2019; Merritt, 2016; Taylor, 2016; Tomlinson, 2015).

The literature supports differentiation as a classroom model that can be used to design instruction to meet the diverse needs present in the inclusive classroom and support a learner-centered environment (Tomlinson, 2015, 2018; Tomlinson et al., 2003). However, even though this model provides a framework for planning instruction, teachers express the difficulty in providing appropriate levels of challenge, autonomy, and interest in learning activities to meet the needs of their diverse classes without accessing extra support (Ludicke et al., 2019). While the review of the literature supports differentiation within the virtual classroom to properly

challenge gifted and talented students, the research is missing the voice of middle school teachers describing what they are experiencing in planning and implementing differentiated lessons and assessments for gifted students through online instruction. Currently, the shared experiences of teachers using differentiated instruction through a remote learning platform to challenge the gifted population have not been explored and the long-term impacts of virtual learning are unknown. The potential for virtual classrooms to meet the needs of gifted students has made online learning a topic of great interest in gifted education, and it is important to investigate the shared experiences among teachers and the challenges to teach gifted and talented students enrolled in the inclusive classroom through online instruction, especially in terms of curricular rigor and level of challenge present. Furthermore, this information could be used by educators to either improve online gifted education or discover new opportunities for gifted learners. This study may provide more insight into the phenomenon to help prepare teachers to increase the achievement of gifted students, strengthen school and district gifted programming, and support teacher education programs for identifying and supporting the gifted learner.

Chapter Three will provide the reader with an explanation, the foundation, and the use of phenomenological research methodology in this study. The chapter will provide an in-depth explanation of all facets of the research process.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to explicate the lived experiences of core academic middle school teachers with differentiating instruction and assessment for gifted learners in a virtual environment in rural Maryland. This chapter explains the research design and the research questions. The chapter also explains the setting, participants, and the procedures that were followed when conducting the research. The role of the researcher will be discussed, as well as, a detailed description of the data collection methods using, face-to-face interviews, journal prompts, and document analysis. Chapter Three provides the reader with an understanding of the types of data that was be collected, the strategies utilized for data collection, and the analysis procedures to ensure the replication of the study. The chapter will conclude with information on the methods to ensure trustworthiness, credibility, dependability, confirmability, transferability, ethical considerations in the proposed research, and data collection resulting in a discussion of the analysis procedures and a chapter summary.

Research Design

Capturing and learning from the experiences of others not only provides insight for understanding but also allows for the researcher to approach and engage with a complex phenomenon (Farrell, 2020). Phenomenology, as a philosophy and approach to research, is centered on the human experience (Farrell, 2020 Stolz, 2020). Additionally, a transcendental phenomenological approach to research in the field of education is an underrepresented method of conducting qualitative research (Farrell, 2020; Neubauer et al., 2019). However, this qualitative approach is the best fit for describing the essence of a phenomenon and the experiences of the individuals that have experienced it (Creswell & Poth, 2018; Neubauer et al.,

2019). According to Creswell and Poth (2018), the phenomenological approach describes a common meaning between individuals who share the lived experiences with a concept or phenomenon. While subjective, evidence was obtained from the participants, and each participant had an opportunity to report their own experience (Creswell & Poth, 2018). Therefore, capturing commonalities from individual experiences within a group of educators, and providing insight to further understand the essence of the experience. Therefore, to study the experiences of core academic middle school teachers with differentiating instruction and assessment for gifted and talented students through a virtual platform, this research was conducted using qualitative research. The general research design was phenomenological, and the specific design was transcendental phenomenology (Creswell & Poth, 2018; Marshall & Rossman, 2015; Maxwell, 2012; Stolz, 2020).

An educational phenomenon occurred in the spring of 2020 when Maryland teachers were mandated to teach students using a virtual platform regardless of their technological experiences due to the Covid-19 pandemic (Maryland State Department of Education, 2020). While districts provided professional development and virtual training, teachers were charting in new territory (Maryland State Department of Education, 2020). As the government was shutting down brick and mortar school buildings, virtual classrooms were open for distance learning.

While the long-term effects of this worldwide pandemic on education are yet to be determined, a need to collect teachers' experience is of high importance in the field of education. Furthermore, it is important to capture and describe the experiences of teachers within the Maryland Public School System regarding gifted and talented enrichment and online instruction. The transition to synchronous instruction due to the recent pandemic placed many gifted and talented students at risk for underachievement due to the lack of challenge presented in the

online environment. Due to the nature of individual experiences including both intrinsic and extrinsic motivation, a Phenomenological approach was the best fit method for this study. Furthermore, as illustrated by Moustakas (1994), a researcher can obtain a more in-depth understanding of the phenomenon by reducing the information collected to a textural description (Creswell & Poth, 2018). Therefore, by using a qualitative research approach, the experience of differentiating lessons to challenge gifted students during the recent pandemic can be better understood. Additionally, insight into the challenges of delivering differentiated lessons through a virtual platform can be explained. By using transcendental phenomenological methods to capture gifted teachers' experiences through interviews, observations, and documentation, an in-depth explanation of the phenomena is presented (Colaizzi, 1978). Additionally, the use of a transcendental phenomenological approach not only consists of identifying a phenomenon and collecting data from several individuals who have experienced it, but it also includes bracketing experiences to find common themes among the experiences (Creswell & Guetterman, 2019).

Using a transcendental phenomenological approach, this study sought to explicate teachers' lived experiences challenging and preventing gifted and talented underachievement in middle school students while providing instruction virtually in a rural southern Maryland school. Experiences were bracketed in both the same content, as well as, cross-curricular courses. Using Clark Moustakas's *Phenomenological Research Methods (1994),* the researcher describes the shared experiences with this phenomenon and reduced the information collected through bracketing to a textural description so that the phenomena can be presented. Using this research method, the problem of gifted and talented students not being adequately challenged is explained using teachers' experiences to develop a detailed understanding of the phenomena that exist in southern Maryland (Creswell & Guetterman, 2019). The methodological aspects of the study

include observation, interviews, documentation, and reports from the philosophical assumptions that differentiated lessons and/or self-pacing instruction increases student self-efficacy that could result in the prevention of gifted underachievement, especially for the southern Maryland school district.

Research Questions

To explicate the essence of the lived experiences among core academic instructors the when the curriculum and instruction are differentiated during synchronous instruction to target and challenge the gifted learner in the general education classroom, the following research questions were answered.

Central Research Question

What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?

Sub-Question One

How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually?

Sub-Question Two

How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners?

Setting and Participants

This study was conducted in ten integrated classrooms in two rural middle schools in Southern Maryland. With this school district being in a Transient area, many families enroll in this school district with their students not being tested for services. Unfortunately, the gifted and

talented students have been an overlooked demographic in this area for a while, and many students are not identified. Additionally, there is underrepresentation in many minority groups as well. While there is not an established gifted and talented program, the district has begun to offer enrichment opportunities for gifted students, but these programs are in the developing stages. These factors as well as its geographic location made this an ideal location for this study. The study took place in ten inclusive classrooms in which teachers are asked to present gifted students with differentiated instruction to engage and challenge them. The lived experience of this challenge were explored.

Site

The sites consisted of the two largest out of six middle schools in the district and represents a diverse community of students, teachers, and socioeconomic classes. While these schools consist of a diverse population, they do not qualify as Title 1 schools. The Southern Maryland School District (SMCD) is a small rural district, and serves approximately 16,000 students and 2,100 employees (Maryland State Department of Education, 2020). Due to its location to major cities, the northern portion of the school district was the site of interest due to its high mobility rate and contains the highest gifted student populations. While three other small towns feed into these schools, this area of the district consists of one small town that houses two of the districts largest middle schools. The demographics of the area range from small farms to grand estates. Each of the middle schools enroll approximately 700 students and have 70 employees on staff (Maryland State Department of Education, 2020). Additionally, there is a wide range of demographics among the students, including those with disabilities, impoverished, privileged, and gifted. Currently, the ethnic group breakdown is 3% Asian, 9% African American, 4% Hispanic, 8% Multiracial, 1% Native American/Pacific Islander, and 79%

Caucasian students (Maryland State Department of Education, 2020). 25% of these students receive accommodations through individualized plans or 504s, and over 10% of students come from military families with more students having families with other government associations. Students who have been identified as gifted and talented only account for 17% of the school population (Maryland State Department of Education, 2020; Maryland State Department of Education, & Maryland Advisory Council on Gifted and Talented Education, 2020). In the school district, there are approximately 40 identified gifted and talented students in each middle school, except for the schools of interest that have overextended the average and serve over 100 gifted and talented students. These students are integrated into all classrooms including co-taught classrooms. At the site level, the school administration at each is comprised of one principal, one assistant principal, and a dean of students. Each school operates on a content area leadership organization where the members of the instructional leadership team and administration meet regularly to make instructional decisions. Teachers share in the decision-making through their department representation in professional learning communities (PLC).

Currently, one of the schools shares the same campus as a local high school. This allows academically advanced students to take courses above grade level and receive high school credit. Although there is not an official gifted and talented program instituted in either of the schools, the school district offers gifted and talented after-school enrichment programs and accelerated math courses. Students identified as gifted at this school took the CogAT test in the second grade. However due to the transient nature of this school MAP testing, grades, and teacher recommendations are used for identifying gifted students as well (Maryland State Department of Education, 2020). While the state of Maryland does not currently offer push-in or pull-out services for these students, a school-based liaison is present at the school to help support both the

teachers and students. However, the state is requiring that enrichment opportunities are provided by the individual schools (Maryland State Department of Education, 2020).

Table 1:

Site Demographics

Site Data						
Site Name	Student Poputlation	Employment	Student teacher ratio	Number of Identified Gifted Students (2021)	Number of Identified Gifted Students (2022)	Percent of the Student Population
Site 1	672	37	18.2	107	149	16.00%
Site 2	622	38	16.4	84	136	13.50%

Demographics/Site								
Site Name	American Indian/Alaska Native	Asian	Black	Hispanic	Native Hawaiian/Pacific Islander	White	Two or MoreRaces	Free/reduced Lunch
Site 1	1	15	62	26	2	510	56	72
Site 2	0	14	48	38	–	457	64	72

Participants

The purposeful criterion-based sample was drawn from two middle schools in southern Maryland described in the setting section of this proposal. Purposeful sampling is a common method used in qualitative research and allows the researcher to locate participants with experiences with the phenomenon to be studied (Creswell, 2015). For this study, the participants had at least one year of experience teaching gifted students in virtual classrooms on the middle school's level; therefore, the criterion was established. The use of criterion sampling was appropriate to ensure that the participants met the criteria in their experiences (Creswell, 2015). Criterion sampling was conducted by contacting the principal to obtain permission to email a request to participate to all teachers in the school and asked them to complete a survey of their demographics, including years of teaching experience and experience working with gifted students. Purposeful criterion-based sampling is appropriate for this phenomenological qualitative research as participants will be chosen for their relevance to the research question and the analytical framework proposed by the research (Schwandt, 2015).

Table 2

Participant Demographics

Age	Gender	Race/Ethnicity	Education	Years of Experience	Years Working with Gifted Student	Currently Working with Gifted Students
36-45	Female	White	Bachelors, Master	10 to 15	3	Yes
46-55	Female	White	Bachelors, Master	20 to 25	22	Yes
46-55	Female	White	Bachelors, Masters	20 to 25	21	Yes
46-55	Male	White	Bachelors, Masters	15 to 20	16	Yes
46-55	Male	White	Bachelors, Masters, Educational Specialist	20 to 25	21	No
46-55	Female	White	Bachelors, Masters	30 to 35	32	Yes
46-55	Female	White	Bachelors, Masters	20 to 25	20	Yes
36-45	Female	White	Bachelors, Masters	10 to 15	15	Yes
46-55	Female	White	Bachelors, Masters	15 to 20	20	Yes
36-45	Male	White	Bachelors, Masters	15 to 20	18	Yes

Participant selection took place until maximum variation and data saturation were

achieved with between 5 to 25 participants (Creswell, 2013). Since the purpose of the research study is to represent the population and ensure the diversity of the sample, the sample size was between 10 participants. This was an adequate number as the recommended sampling size for phenomenological qualitative research is between 10 and 15 participants (Creswell, 2013). Additionally, having 10 participants for data collection accounted for attrition. However, ensuring that the participants have rich experiences to contribute to the study was more important (Fusch & Ness, 2015). By selecting 10 educators who taught both co-taught, general education courses, as well as advanced level courses, a better representation of all student levels was presented. However, for purposes of this study, the selection of teachers who have experience with the phenomenon using purposeful criterion-based sampling and the creation of probing research questions allowed for data saturation to be attained.

Researcher Positionality

The motivation for this research was to investigate the perceived level of challenge among gifted students in a general education setting and understand how to push these students to reach their cognitive potential. After receiving my Master's in Education, I began working in low-income schools in Alabama and Massachusetts. Serving as a member of the Instructional Leadership Team and working with the state board of education, I became passionate about differentiating instruction to meet the diverse needs of students. Working over 15 years as a classroom science teacher in both the public and private sectors, I worked with special educators to ensure the instruction is differentiated to meet the diverse needs of learners in the classroom. However, I noticed school districts were not interested in pushing students ahead, but rather closing learning gaps.

While teaching both high school and middle school science, I experienced positive results

while implementing inquiry-based learning in the classroom such as project-based learning. After realizing that all students were engaged and eager for class, I began to develop and implement differentiated lessons that promoted gifted and talented advancement without leaving the students with learning disabilities behind. This discovery created a passion not only for the gifted learner but for the discovery of research and methods that would further benefit these students during instructional time.

Additionally, working as the gifted and talented liaison, I quickly realized that my peers did not know the students identified as gifted and talented, nor did they have the awareness of gifted underachievement. To add to this problem, the state of Maryland does not offer or recognize gifted and talented services during regular school hours unless the student has an identified learning disability. At the beginning of the year, teachers are provided with vital information on how to accommodate instruction for both students with 504s and IEPs, however, they are not told which students are gifted or how to modify instruction to meet their needs. Unfortunately, teachers in my district must conduct classroom observations to receive information on other students' abilities before the institution of school liaisons. While current state test scores provide information on students' abilities per content area, they do not provide a holistic view. According to Maryland law, students are tested and identified during elementary school before third grade and then retested between third and fifth grade and between sixth and ninth grade. Additionally, teachers receive training concerning how to scaffold instruction to provide equitable access to students with IEPs, but they do not receive training on how to differentiate instruction to push gifted and talented students forward. As a leader in my school, I have worked with both gifted and talented students and their teachers to ensure curriculum and instruction are challenging and rigorous to meet their needs. I have been developing after-school

enrichment curricula that not only accelerate the gifted learner but have been adopted by my district to be implemented as a required program for GATE (Gifted and Talented Enrichment). I am passionate about gifted learners and accelerating students to reach their potential.

Interpretive Framework

Considering both my scientific background and passion for the gifted and talented population, my metatheatrical stance and research approaches are grounded in post-positivism. Post-positivism is a metatheoretical view that accounts for the researcher's theories, background, knowledge, and values that can influence what is observed and studied (Creswell & Poth, 2018). Using this approach, I was a data collection instrument and not an expert to achieve a holistic view of the shared phenomenon. I believe that using this approach, I increased my knowledge concerning the phenomenon, while taking a neutral stance when conducting observations and interviews (Creswell & Poth, 2018). Furthermore, I assumed that in this current study there is a probability that curriculum differentiation will provide the necessary challenge and reveal positive perceptions and experiences for the gifted student population (Tomlinson, 2015, 2018). It also made me aware of my potential biases that would impede on discovering the truth. Additionally, as a Christian, I will also approach this research with a Biblical worldview. A biblical worldview framework is based on the infallible Word of God, from which Christians, view reality and make sense of life and the world (Tackett, 2006). It is important to know that I believe in absolute truth, and by conducting research using a Biblical worldview, I can discover what is real and true (Tackett, 2006). It is for these reasons, I see that there is one truth, but in this qualitative study, it was important to understand how everyone's perspectives contribute to understanding this phenomenon. Therefore, it was important that as the researcher, I captured the meanings, experiences, and perceptions of each of the participants in this particular study to

understand the truth.

Philosophical Assumptions

The philosophical postulations that I bring to this study are best described through social constructionism. Through this study, I assumed that every individual I interviewed has thoughts, interpretations, and meanings (Creswell & Poth, 2018). These views of the phenomenon are critical to understanding and constructing the meaning of why this situation exists. I acknowledge that my own experiences with this phenomenon do shape my interpretation of understanding the views of others, but as a researcher, I took an unbiased approach and admit my own biases (Creswell & Poth, 2018) Through the use of both interviews and journal prompts, I captured teachers' experiences towards gifted education and their perceptions of challenging these students online using differentiated instruction. While subjective evidence was obtained from the participants, each participant had an opportunity to report their own experience (Creswell & Poth, 2018). Additionally, I relied on the thoughts and feelings of these individuals as evidence, however, due to my background, I was viewed more like a colleague to the participants instead of a researcher (Creswell & Poth, 2018). Using a Social Constructivism interpretive framework, interviews and journal prompts presented the multiple experiences of teachers to understand the central phenomenon (Creswell & Poth, 2018; Marsh, 2010).

Ontological Assumption

Although, I used a Social Constructivism interpretive framework in which multiple realities are constructed through our lived experiences and interactions with others, as a Christian I believe that there is one singular reality and that is God's truth (Creswell & Poth, 2018; Marsh, 2010). While the human understanding of truth is imperfect and often mistaken as multiple

truths, God explains in his word that He is “the way the truth and the life” (John 14:6, New International Version). While in this study, the individual realities of the experience showed that there are multiple realities, but as the researcher, I believe there is one central truth. It is through understanding and piecing together the lived experiences and interactions of the individual participants, their multiple realities became a lens to explain the one central truth.

Epistemological Assumption

In this study, knowledge is subjective and obtained through the lived experiences of the participants and their interactions with the phenomenon. While knowledge is constructed between the researcher and the researched, it was my goal to create a completely unbiased study in which my experiences are not relevant to the process or the outcomes (Creswell & Poth, 2018). Therefore, the acquisition of knowledge of challenging gifted students and the use of virtual instruction is a subjective process, one that can be measured through teacher experience, and that measurement and subjective report is reliable and useful knowledge to the field of education. The knowledge gained through the shared experiences of professional educators, who are considered experts in their field, provide valuable insight for further research concerning this phenomenon (Creswell & Poth, 2018).

Axiological Assumption

The measurements for challenging exceptional students and virtual instruction are subjectively inform by both Bandura’s (1986) social cognitive and McClelland’s (1988) achievement-motivation theories. Both are valuable to understand in the field of gifted education. Being once identified as being exceptional, a parent of a gifted student, and a teacher of remarkable students, I am unapologetic about my belief that this population of students are underrepresented in schools today and are often not challenged to reach their fullest potential.

While these are biases that I recognize, I did my best to keep them from influencing the outcome of this study. In this study, I understood that it is important not to allow my predispositions to keep me from effectively seeking the truth, bracketing data of the information gathered, or communicating the results and findings.

Researcher's Role

As the researcher, my role in qualitative research is critical for the collection data and implementation of the analysis of the data (Creswell, 2015; Merriam, 2002; Miles & Huberman, 1994). Therefore, my role in this study was that of an observer-as-participant, as I was the primary instrument of data collection and analysis. Data collected from interviews, observations, and questionnaires uncovered the emerging concepts and patterns of teachers' experiences. Thus, I recognized the potential for bias on my part, which could impact the outcome of the study, that made this a very challenging balancing act of being objective and nonjudgmental in my thoughts, observations, and actions. That potential bias, though cognitive, is due to my experiences teaching and ensuring equitable instruction for gifted and talented students in my 15 years of teaching experience.

Nonetheless, this could also have aided me in my data collection, inductive analysis, and understanding of the process and phenomena being studied, as it is something that needs to be truly experienced before having the ability to write about. That is why the use of time interval observations, bracketing field notes, and memos were vital in reporting and analyzing the data. In addition, I kept a personal journal to document my thoughts and feelings through the whole process, which was used to further document the relationship I

have with the data and analysis. Furthermore, using the process of member checking aided with controlling researcher bias.

Procedures

Prior to conducting this study, my proposal was defended and approval to conduct this study was obtained from the Liberty University and the Institutional Review Board. Additionally, permission to conduct research was obtained from the schools and the school district. After confirming district approval, the site was contacted to elicit participants for the study. Purposeful criterion-based sampling was utilized to obtain participants who have experience teaching gifted students in core academic classes at the middle school level for at least one year remotely. This was achieved through requesting permission to send an email invitation to all teachers at the school, which included a demographic and experience level survey through Microsoft Forms. Criterion-based sampling is essential to phenomenology as it is necessary to have participants who have experienced the phenomena (Creswell, 2015; Moustakas, 1994; Stolz, 2020).

Research protocols were followed for working with adult volunteers. Selected middle school teachers were then contacted by the researcher via e-mail and formal letter, using an approved letter of interest inviting them to participate. Teachers who exhibited an interest in the study were contacted for a second time to set up an interview at their convenience through Microsoft Teams. Prior to the interview, consent forms were obtained from the participants before they contributed in the study (see Appendix C). The consent letter explained the purpose of the study, including known risks, and explained participants were allowed to withdraw from the study at any time without any consequence from the researcher.

To maintain privacy participants' names and the school were replaced with a pseudonym names. Records were kept confidential and placed in a location only accessible to the researcher.

Lastly, the informed consent was kept in a separate location from the interview transcriptions. Additionally, data was collected through interviews, documents, and journals. Data from interviews, documents, and journals were used to provide an overall picture of the phenomena. The data concerning the shared experiences provided insight to elicit an understanding of the teachers' perceptions of challenges during a virtual lesson.

Interviews were recorded and transcribed for analysis purposes. Transcriptions and recordings were kept confidential and were stored on a password-protected zip drive that is only accessible to the researcher. After the interview were complete, volunteers were asked if they have any documents that will help provide vital information to this study. They were also provided with journal prompts questions that they submitted to the researcher electronically. Journal prompts wer designed to help participants reflect on teaching students in an online format.

Documents were collected after participants engaged in the interview. While, the participants were not currently teaching virtually, lesson plans, PLC (Profession Learning Community) notes, and professional development transcripts were collected to show the levels of differentiation, entry points, and extensions in the lesson to allow for a challenge. While lesson plans were not obtained by the participants, the planning for differentiated lessons was discussed in the interivews. Additionally, teacher interviews were conducted to determine if gifted students are receiving the appropriate level of challenge. Through open-ended questions, answers were bracketed to determine teachers' perception of challenge during synchronous lessons. Additional data from documents and journals were used to provide an overall picture of the phenomena. Furthermore, the data collected was used to piece together the shared experiences of the

educators and provided insight to elicit an understanding of how to challenge the gifted learner in a virtual format.

Additionally, while classroom observations could not be conducted retrospectively, a documents analysis provided a glimpse into the overall experience, and provided insight into whether virtual instruction provides adequate levels of challenge for the gifted learner. Both documents and journal prompts were used as a comparison tool while analyzing the interview transcripts to capture the essence of the phenomena and the lived experiences.

Data analysis was continual throughout the data collection process (Miles & Huberman, 1994). As interviews were completed, a professional transcriptionist transcribed them. Ongoing analysis using open coding was conducted to allow the experiences of the interviews to remain fresh for the researcher. Themes were developed using MAXQDA qualitative data analysis software. Once all data was transcribed, investigated, and coded, final data analysis and member checking was conducted, and the results reported (Creswell, 2013). This method of analysis allowed the researcher to take descriptions of the experience and analyze them for significant phrases, develop meaning and cluster them into themes to present an exhaustive description of the phenomenon and determine commonalities of the lived experiences.

Permissions

Prior to conducting this study, approval from the Liberty University and the Institutional Review Board to conduct research was obtained (see Appendix A). Additionally, permission to conduct research was obtained from the school and the school district (See Appendix B). Research protocols were followed for working with adult volunteers. In addition, each participant signed an informed consent form was obtained prior to participating in the study (see Appendix C).

Recruitment Plan

This study sought to explicate the lived experiences of middle school teachers in a rural school district in southern Maryland. Currently, the schools selected to study have less than 40 classroom educators that prepare lessons or have prepared lessons to provide synchronous online instruction to the exceptional learner. For this study, 10 participants were selected through criterion-based sampling which accounts for, 7.5% of the population. The researcher contacted the identified middle school teachers via e-mail and formal letter, using an approved letter of interest to invite them to be a part of this study. Teachers who exhibited an interest in the study were contacted for a second time to set up an interview at their convenience via Microsoft teams. Teachers who responded, no more than fifteen teachers representing every grade level, content area, as well as the ethnic and gender diversity present in this group of teachers were selected (Creswell & Poth, 2018). By selecting 10, general classroom educators who teach gifted and talented students maximum variation sampling will occur based on these criteria (Creswell, 2015). Prior to participating, volunteers received an Informed Consent Form (Appendix F) that explained the purpose of the study, outlined their rights as participants including the right to withdraw, and informed the participants that they will be treated ethically throughout the study. Letter and consent paperwork was emailed to teachers who meet the criterion of teaching gifted students through online instruction. Given the nature of qualitative research, participants were given pseudonyms.

Data Collection Plan

For purposes of triangulation, three methods of data collection were used in this study, interviews, document collection, and journaling. The data collection procedures for this study followed the recommendations of established qualitative researchers (Erlandson et al., 1993;

Lincoln & Guba, 1985; Miles et al., 2014; Patton & McMahon, 2014). Qualitative data from other documents captured the planning phase of differentiated lessons. Since classroom observations could not be conducted in retrospect, copies of documentation provided insight into teaching practices. Documents included collaborative planning documentation, professional development transcripts and professional learning community (PLC) notes. Additionally, Interviews were conducted to capture teacher experiences of differentiating instruction using a virtual platform. While classroom observations would have given a glimpse of the overall experience, the interviews provided perceptions of the overall phenomena. Lastly, journal prompts provided the participants time to reflect on their experiences. Additionally, the use of journal prompts allowed participants to draft, edit, and submit responses which will enrich the perspectives because they were more reflective in their responses.

Individual Interviews Data Collection Approach

The first step of this study was to employ individual semi-constructive interviews (Gall et al., 2007). Before the interview began, the purpose of the study and the interview was defined, and verbal compliance was obtained. Interviewees were also be thanked for their participation in this study. Teachers participated in individual interviews based on experience. These interviews provided insight into experiences during the phenomena. All interviews were transcribed from recordings. The following questions are grounded in the literature and aided in providing a holistic picture of the virtual learning experience in terms of perceived motivation and challenge among gifted and talented students.

Individual Interview Questions

1. Please introduce yourself to me, as if we just met one another.

   CRQ

2. Please tell me about your classroom role and experience.

   CRQ

3. Please describe the cognitive levels in your classroom.

   CRQ

4. How would you describe your experiences teaching synchronous lessons online?

   SQ1

5. Explain your lesson planning process for the online experience?

   SQ1

6. Describe your experiences, during on-line instruction, and how would you ensure all your students were reached in a lesson?

   SQ1

7. How would you compare student achievement during this experience to that of a face-to-face environment?

   SQ2

8. Describe a time through virtual instruction in which a student is not reaching their full potential and your reactions to this scenario?

   SQ2

9. How would you describe a low-performing gifted student in your classroom?

   SQ2

10. Describe how you would challenge learners, especially gifted students, in the virtual environment.

    CRQ

11. Explain how you make the virtual classroom experience more/less challenging for the gifted learner?

    CRQ

12. We have covered a lot of ground in our conversation, and I so appreciate the time you've given to this. I have one final question. What else do you think would be important for me to know about your experiences?

    CRQ

Questions one and two are knowledge questions (Cassell, 2015). These questions were designed as background questions to provide insight on previous classroom experiences in which differentiation may or may not have been implemented. While open-ended, these questions were intended to be relatively non-invasive, and ideally served to help develop rapport between the participants and the researcher (Cassell, 2015). These questions could be adjusted as necessary based on participant input and data collected.

Questions three and four addressed the cognitive levels within the classroom as well as planning to meet the diverse needs, especially in the virtual environment (Maslow, 1954). These questions were compared to question two to determine if classroom experience plays a role in planning a more rigorous experience for gifted students. It was also important to ask questions that assisted the participants reflection on their lessons and experience as well as the progress made in examining and evaluating student learning in the virtual platform. While differentiation is a non-directive teaching model which provides teachers with the ability to offer different paths to understanding content, process, and products, appropriate for students' strengths, interests, and learning styles, it was important to determine if it was an established teaching method (Dixon et al., 2014; Parkay et al., 2014). Additionally, educators have the unique ability to differentiate the

instruction and vary the challenge of the task. However, the focus of differentiation is not limited to challenging students intellectually (Horak & Galluzzo, 2017, Tomlinson, 2015). Therefore, these questions were designed to evaluate the planning and implementation of instruction that is differentiated.

Question five through seven invited the participants to reflect on their teaching experiences. While question five invites them to reflect on online teaching, question seven allows participants to compare the experience to the face-to-face environment. Within the instruction, it is important to provide entry points for each student to allow them to access the curriculum (Blackburn, 2018; Manuel & Freiman, 2017). Therefore, it is important to ask question six to determine if teachers are providing the rigor and challenge at the entry point of the lesson and throughout the lesson to reach gifted and talented students. According to McClelland's achievement- motivation theory, a student's behavior and performance are based on the individual's need for achievement (Elbeheri et al., 2018). Therefore, gifted students will be engaged in the lesson due to their need to achieve, and not due to interest in the subject. For this reason, it is important to capture students at the beginning, middle, and end of each lesson. Additionally, intrinsic motivation is influenced by challenge, curiosity, control, fantasy, and relatedness of the content (Freeman et al., 2008; Liu et al., 2011). However, in the virtual classroom, the lack of a challenging curriculum put gifted students at a higher risk to not excel and to tap into their potential (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020). Additionally, the virtual environment poses personal obstacles for many students including the gifted (Almukhambetova & Hernández-Torrano, 2020; Ridgley et al., 2020). Students not only need to be motivated and engaged in the curriculum, but they also need to be provided opportunities to grow and contribute socially which can be challenging in a virtual platform due

to new stresses including perceived judgment from peers and teachers (Almukhambetova & Hernández-Torrano, 2020; Patrick et al., 2007). Understanding all the factors that may influence the level of challenge or causes of gifted and talented underachievement in the virtual classroom provide educators with insight into how to further modify the curriculum and instruction to meet their individual needs (Maslow, 1954; Ridgley et. al., 2020).

Questions eight through eleven invites the participant to talk more in-depth about the phenomenon of perceived challenge in the classroom. These questions required the participant to open up and vulnerable, and lead to keeping the interview moving along engagingly and yielding valuable data. This is particularly important given the nature of the question that follows. The questions do increase in the degree of vulnerability as teachers are asked how they can challenge students more in the classroom and therefore strategically placed towards the end of the interview. At this time in the interview, a good rapport was established with the participant (Cassell, 2015), and while some participants did not know how to begin to answer these questions, they were willing to share more intimate details about increasing the level of challenge within the virtual classroom (Velichová et al., 2020). Additionally, many general educators do not know how to properly challenge gifted students and scaffold instruction for struggling students simultaneously (Taylor, 2016; Tomlinson, 2015). These questions evaluated teachers' efficacy in this area.

Question number twelve was designed to give the participants a final opportunity to offer valuable insight and served as the closing question (Patton, 2014). This question also provided the participant freedom to add to what has already been said and kept him or her in the role of expert on his or her own experience. This final opportunity was expected to yield a tremendous amount of valuable information.

When asking these questions, the researcher was also prepared to probe further to gain additional data about how they felt about and responded to questions concerning their experiences. These questions were designed to allow teachers to reflect on their experiences teaching remotely while attempting to engage and challenge gifted learners. These questions also invited participants to become an observer, or co-researcher (Cassell, 2015; Creswell & Poth, 2018) and evaluate their experiences. Additionally, these questions provided another way to elicit valuable data and are crafted to help to transition the participants into the role of expert (Cassell, 2015).

Individual Interview Data Analysis Plan

After reviewing and identifying literature as it related to teacher efficacy challenging gifted students in the virtual environment, instructions, guiding questions, and topics needed for the phenomenological semi-constructive research interview were selected (Moustakas, 1994). The nature of an interview provided the construct of knowledge between the researcher and the participant, therefore through individual semi-constructive interviews, the researcher obtained descriptions of the participants' experiences (Creswell & Poth, 2018). Through the interview process, a description and understanding of the phenomena was gained. Therefore, it is important to ensure appropriate capture of the participants' experience, so interviews were recorded and transcribed with the appropriate research software. Transcriptions of the participants' interviews were checked for accuracy (Moustakas, 1994). Additionally, participants were allowed to review individual transcripts for accuracy before bracketing themes of the participants' experiences (Moustakas, 1994). Ten interviews were conducted through teleconferencing using Microsoft Teams. Conducting interviews in this manner was a convenience of the participant and allowed them to be in a less intrusive environment.

Document Analysis Data Collection Approach

Due to the nature of online education and the reflection of teaching during the pandemic, it was difficult to conduct classroom observations. Therefore, existing records provided insights into the classroom that could not be observed or noted retrospectively. This information was found in document form. Lincoln and Guba (1985) defined a document as "any written or recorded material" not prepared for the purposes of this study but created prior to the request for documents from the researcher. Documents included professional development notes or transcripts, professional collaborative planning notes and current teaching strategies provided insight into how teachers were reaching and teaching students through online education. Therefore, valuable insight into this qualitative research was provided through documents provided by the participants (Creswell & Guetterman, 2019). To capture the complete planning and implementation of differentiated lessons for gifted and talented students, documents were requested from participating teachers and provided valuable information in helping understand the central phenomenon (Creswell & Guetterman, 2019). Individual lesson plans were desired as they provided insight to the classroom lesson as well as identify the levels of differentiation, especially for gifted students. Other data including individualized goals and objectives were requested to understand the level of differentiation and challenge. Lesson plans provide key insight into entry points, levels of differential instruction, and extension activities. However, all obtained documents such as, collaborative planning notes, professional learning community notes, professional development notes or transcripts, and teaching logs, help to better understand the phenomenon.

Document Analysis Data Analysis Plan

After uploading the data, a careful review of the documents was be conducted. This

provided a broad sense of the phenomenon. During this phase, I jotted down notes in my research notebook as ideas come to mind (Creswell & Guetterman, 2019). Next, I began coding each document based on the topics that arise. I then conducted an analysis of the data and bracketed themes to separate exposures to the most significant degree to reveal the participants' perspectives. The bracketing focused on the phenomena explored as I outlined bias by thoroughly explaining any perceptions to negate prejudice (Creswell & Poth, 2018). Then an assessment and analysis of all the relevant themes from documents was conducted to describe the participants' experiences and to understand the phenomena (Creswell & Poth, 2018). This process was repeated for all documents and cross-referenced using the MAXQDA software (Creswell & Guetterman, 2019). After all the data was coded, a list of themes was compiled and compared to the data to get a comprehensive understanding of the phenomenon. This method allowed me to present the experience of remote learning for gifted and talented educators and accurately described the participants experiences of challenging students. Starting with participant input, I was able to identify themes, as well as input to accurately reflect experiences. Additionally, an analytic approach (connecting strategy) to data analysis was conducted. This method of analysis allowed me to take the descriptions of the experience and analyze them for significant phrases, develop meaning and cluster them into themes to present an exhaustive description of the phenomenon.

Journal Prompts Data Collection Approach

In addition to individual interviews, electronic journal prompts were used as a complement to the interview process. Many times, after the interview, individuals will reflect on the experiences, and the journal prompt allowed them to add any additional information that may have been left out during the interview. Additionally, the use of journal prompts allowed

participants to draft, edit, and submit responses which enriched the perspectives due to the reflectiveness in their responses. Each journal prompt took participants on average 1 to 3 minutes to complete. Therefore, limiting the number of prompts to ten kept this process under an thirty minutes for participants to complete. Due to the nature of teaching, many participants were not able to drop everything in their lives to complete journal prompts, therefore giving them two weeks was a good compromise between urgency and fairness.

Standardized Open-Ended Journal Prompt Questions

1. Describe the methods of instruction you received as a student growing up.
2. Describe your philosophy of teaching.
    a. In what ways have those experiences impacted your instructional practices?
3. Describe your primary method for instruction in your content classroom. (Examples if needed: guided learning, lecture notetaking, independent research, collaboration, learning centers).
4. Describe the instructional practices you use in working with your gifted students.
5. Describe any informative experiences you have had working with gifted and talented students.
6. Describe your level of confidence in planning instruction and assessment for gifted and talented students.
7. Describe your attitudes or beliefs about differentiating instruction for gifted and talented students.
8. Describe your overall experiences providing opportunities for students to work in groups or with partners.

9. Going forward, what further training for working with gifted and talented students you would like to receive?
10. Describe anything else about your experiences working with gifted and talented that you haven't already shared, and you would like to.

Question one was designed to allow the participant to focus on how their learning experience connects to the way they teach (Moustakas, 1994). Research suggests that teachers tend to teach the way they were taught despite advanced training in more effective methodologies (Davis & Forbes, 2016).

Questions two through six were designed to address the central research question regarding the participant's experiences with planning and differentiating for gifted students. Research suggests that there is often a disconnection between research and practice (Runesson Kempe, 2019,). These questions sought to elicit information regarding the strength of that assertion. These questions also addressed the challenges teachers face with creating dynamic, virtual lessons that were well received by the diverse learners within the classroom (Almukhambetova & Hernández-Torrano, 2020; Ridgley et. al., 2020).

Questions six through eight were designed to address the first sub-question regarding teacher attitudes toward teaching gifted talented students and the second sub-question regarding teacher sense of efficacy. Teacher attitudes have been linked to student achievement; therefore, the responses to these questions were important to the exploration of their lived experiences in regard to the phenomena (Akgül, 2021; Camcı-Erdogan, 2015; Matheis et al., 2015). Furthermore, research suggests that teachers with higher senses of efficacy exhibit behaviors of effective teaching while lower senses of self-efficacy are associated with a reluctance to engage in differentiated instructional practices (Akgül, 2021; Dixon et al., 2014; Matheis et al., 2015).

Questions nine and ten were designed to elicit information that may not have emerged naturally in the interview. The final question was used to ensure that any additional information the participants wished to include and was not limited by the questions asked.

Journal Prompts Data Analysis Plan

After reviewing teacher responses from the journal responses, answers were compared and analyzed for a broader description and understanding of the phenomena. The use of electronic journal prompts ensured participants' answers were accurate. Each prompt then was bracketed based on themes of the participants' experiences (Moustakas, 1994).

Data Synthesis

The first step in the analysis process was to reduce the amount of information received through the interview process, document analysis, and journal prompts and determined how it related to the shared lived experiences among core academic, middle school teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction. However, before beginning the analysis process, my journal through this experience was evaluated and my own lived experiences were reviewed to identify personal judgments and prejudices so that they did not affect the process of analysis (Creswell, 2013). As Moustakas (1994) stated, phenomenological research attempts to eliminate everything that represents a prejudgment or presupposition. Therefore, it was important for the analysis of this study that there were no prejudgments of the outcome prior to the analysis of the data.

Using Moustakas's (1994) method for phenomenological analysis (categorizing strategy), data analysis was conducted with feedback and input from participants. Starting with participant input, I was able to identify themes, as well as input to accurately reflect their experiences. Additionally, an analytic approach (connecting strategy) to data analysis was conducted with the

use of the MAXQDA software and Microsoft Excel. This method of analysis allowed me to take the descriptions of the experience and analyze them for significant phrases, develop meaning and cluster them into themes to present an exhaustive description of the phenomenon.

The use of the MAXQDA software does eliminate possible research errors that can occur when bracketing information by hand. Therefore, all documents and information were uploaded to MAXQDA software and the program sorted the data based on type (interview, documents, and journal prompts). This software also allowed me to rapidly search, retrieve, and browse all data segments for bracketing and coding purposes (Creswell & Guetterman, 2019). However, after uploading the documents, a careful review of the data was conducted. This allowed me to get a broad sense of the phenomenon. During this review, interview transcriptions and journal prompts were examined with the research questions in mind. Through this process all relevant statements about the participants experiences were identified and entered on an excel spreadsheet with participant demographic information. Once all the information is entered, repetitive experiences were eliminated. Organizing transcribed interviews and journal prompts into matrixes based on the question assisted in the bracketing of the information (Creswell & Guetterman, 2019). These significant statements were grouped into larger, broad units that describe the "what" and "how." A composite description of student motivation and challenge was provided. The horizontalization of data allowed for lists of the relevant quotes as well as providing equal value regarding the expressions the teachers (Creswell, 2013). These quotes and bracketed themes were grouped by the relevant topics and into units of meaning, and the use of textual descriptions, "ad verbatim" quotations, and structural descriptions were used to describe the data sets (Creswell, 2013). This information was also uploaded into the MAXQDA software to start the coding process. Both analyses were compared, and the themes generated in terms of their

characteristics and how they address the research question were presented. Finally, according to the textual and structural analysis, the essence of the phenomenon was identified.

Additionally, during this phase, I jotted notes in my research notebook as ideas come to mind (Creswell & Guetterman, 2019). Next, begin coding documents based on the topics that arose. I then analyzed the data and bracketed themes to separate exposures to the most significant degree to reveal the participants' perspectives. The bracketing focuses on the phenomena explored as I outlined bias by thoroughly explaining any perceptions to negate prejudice (Creswell & Poth, 2018). I then assessed and analyzed all the relevant themes from documents to explicate the essence of the participants' experiences (Creswell & Poth, 2018). The shared perceptions will be bracketed, to eliminate any doubt or biases concerning the phenomenon or to various coincidences which may obscure the real essence of the lived experiences. This process will be repeated and then cross-referenced using the MAXQDA software (Creswell & Guetterman, 2019). After all the data was coded, a list of themes was compiled and then compared back to the data to get a comprehensive understanding of the phenomenon. This method allowed me to present the experience of remote learning for gifted and talented educators and accurately explicate the essence of their lived experiences motivating and challenging students.

Trustworthiness

To ensure that all data collected is detailed to provide a full picture of teacher experiences with synchronous learning in terms of perceived challenge and motivation, transcriptions of the interviews were recorded and transcribed verbatim. In-depth and multiple interviews ensured to capture the essence of the phenomenon. To increase the trustworthiness of this study, member checks were conducted by summarizing the interviewer’s information and reciting it back to the

participant for accuracy. Asking participants for feedback on conclusions drawn through the research process to ensure the experience was appropriately captured and established the validity of the study as well as providing an effective way of identifying biases or misunderstandings. Finally, searching for discrepant evidence by analyzing discrepant data is part of validity testing in qualitative research (Bickman & Rog, 2009). It is important to analyze discrepant data to address the possibility of needing to change a conclusion. Discrepant data that is not analyzed become ignored, making the conclusions questionable.

Credibility

To increase the validity and credibility of this study, all data was analyzed and bracketed based on relational aspects (Creswell & Poth, 2018). According to Colaizzi (1978), it is important to validate the themes against the original transcripts and through the process determine which data is relevant and irrelevant. All irrelevant data was discarded, and therefore, restricted the information obtained in interview transcripts, documents, and journals to accurately describe the phenomenon. Additionally, prolonged engagement in the field and triangulation of the data contribute to the study's credibility so that the results of this study portray full confidence in the truth of the findings or the extent to which the findings accurately describe reality (Lincoln & Guba, 1985).

Transferability

The results of the current study are specific to the population studied: middle school gifted students which have applicability in other contexts (Lincoln & Guba, 1985). This limits the study to this demographic and cannot be the basis of assumptions for other grade levels and demographics. However, the use of this study can be transferred and conducted at any level of education. In addition, these results are specific to the district examined in the field of study and

content area, but this study could be conducted in other areas but may yield different experiences. While all these limitations are common contexts that limit many informative studies in schools, this qualitative study could be conducted in other areas to provide a richer context of the shared phenomena. However, it is important to acknowledge this study can only create the conditions for transferability but cannot assure transferability. Furthermore, this study examined a specific instructional model (differentiated instruction), although it poses a limitation to the study, it was necessary to collect data from classrooms where the instructional model was implemented. However, the use of another instructional pedagogy could provide deeper insight into the shared phenomenon. While the phenological-based approach enables me to capture the voice of the educator, some themes may be difficult to capture. Using observation techniques alongside the interviews does provide an even more in-depth picture of the reported realities (Creswell & Poth, 2018).

Dependability

In terms of dependability, this study discloses all information pertaining to decision-making conducted through the research process so that the findings are consistent and could be repeated (Lincoln & Guba, 1985; Thomas & Magilvy, 2011). Furthermore, by including peers participating in the analysis process and providing a detailed description of the research methods, increases the dependability of this study. Not only will this qualitative study be reflective, but the researcher was mindful and aware of any preconceptions that may affect this research (Thomas & Magilvy, 2011). Immediately following interviews, a recording field notes regarding personal feelings, biases, and insights was conducted to ensure they do not affect the outcome of this study. In addition, a conscious effort was made to follow the direction of the interviews by asking the participants for clarification when necessary. The interpretations collected through

interviews, documents, and journals produced new insights, allowing for the developing confirmability of the research and application of the study (Thomas & Magilvy, 2011). Additionally, the use of rich, thick descriptions of themes, member-checks of the findings, and the interpretations further address this study's dependability and confirmability. Additionally, the use of a reflexive journal kept by the researcher throughout the course of the study added to the confirmability. Finally, an inquiry audit conducted at Liberty University with a thorough review of the process and the products of the research by the dissertation committee and the Qualitative Research Director will provide further credibility to this research (Creswell & Poth, 2018).

Confirmability

This study was conducted with the highest degree of neutrality and will be portrayed in the research study's findings. It was the goal of this study to capture the experiences of participants and findings are based on participants' responses and not any potential bias or personal motivations of the researcher. The extent to which the findings of this present study are shaped are by the respondents and not researcher bias, motivation, or interest (Lincoln & Guba, 1985). To improve confirmability the researcher maintained a research journal to track personal biases or interests. These biases and interests have been disclosed in this study. A confirmability audit will be conducted to maintain and establish confirmability. An external auditor trying to follow through the progress of events through this study to understand exactly how and why decisions were made (Lincoln & Guba, 1985). Additionally, the triangulation of theories and the use of multiple data sources through the research process to develop a comprehensive understanding of phenomena further increases the confirmability of this study (Patton, 2014).

Ethical Considerations

Before participants could take part in this study, IRB and informed consent was obtained. Participants were informed that their participation in this study was completely voluntary and that they may choose not to participate at any time. All participants will remain anonymous and will not disclose to others concerning their participation and contribution to the study. Secondly, interview protocols were followed, and information shared in the interviews remain confidential. Additionally, to fully protect the privacy of participants, school, and district pseudonyms are used so no information collected concerning this study will be traceable to an identifiable teacher. Names of teachers will not be used in the transcriptions, and no identifying characteristics will be provided. For transcriptions to be accurate and teachers to remain anonymous, recordings were reviewed in solitary and deleted. To ensure confidentiality all information collected through this study was anonymous and all data collected will be shredded once scanned into the researcher's zip drive. All electronic files will be password protected and stored in the researcher's electronic drive to which only the researcher has access. All files will be retained for three years, at which time they will be destroyed.

Summary

This chapter provides the research design and research questions for this transcendental phenomenological study. The goal of the study was to add to the body of research pertaining to challenging gifted and talented students in a virtual classroom environment and to understand the experiences of teaching and learning remotely. By exploring the experiences of core academic middle school teachers with differentiating instruction and assessment for gifted and talented students in rural southern Maryland, educators can develop methods of instructional delivery to ensure these students are adequately challenged. In addition to the research design and research questions, this chapter provides an explanation of the setting, participants, and the procedures

necessary to conduct this study. Participants were selected using a criterion-based sampling from a rural district where there is not an established gifted and talented program. Schools that have gifted and talented programming provide services in the school to ensure gifted and talented students are properly challenged and motivated to learn. Selecting a district where these programs are not established gives raw insight into the teachers' experiences where supports are not provided. Additionally, the role of the researcher was addressed along with a detailed description of the types of data collected, strategies utilized for data collection, and how they were analyzed. Data from this study was obtained to capture the teachers' experiences. To understand the entire experience, data was collected through interviews, document collection, and journal prompts (Creswell & Poth, 2018). Capturing the teachers' experiences with virtual instruction including their beliefs and perceptions of the gifted student provide great insight into how teachers can ensure instruction is differentiated and contains an adequate level of challenge that will ensure student achievement. Finally, information regarding methods to ensure trustworthiness, credibility, dependability, confirmability, transferability, and ethical considerations in this research study have been disclosed.

In closing, the methodology chosen for this study, transcendental phenomenology, was appropriate to the purposes of studying the experiences of core academic middle school teachers with differentiating curriculum and instruction for gifted and talented students in rural southern Maryland through a virtual platform. This design is appropriate as the research sought to understand the experiences of the participants and requires bracketing of the researcher in the process to ensure true intentionality was achieved. The methodology of this research was established clearly for the replication to similar contexts and demographics.

CHAPTER FOUR: FINDINGS

Overview

Chapter Four provides the results of the data analysis. This study sought to explicate the lived experiences of core academic middle school teachers with differentiating instruction and challenging the gifted learner in rural southern Maryland. The following research questions guided this study:

RQ1: What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?

SQ1: How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually?

SQ2: How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners?

This chapter describes their experiences after analysis of the interviews journal prompts and documentation, using the MAXQDA system to analyze, evaluate and triangulate the data, which revealed the experiences of navigating virtual teaching at the middle school level.

Participants

There were 10 participants included in the study. Each participant (a) was a licensed teacher with various middle school contents, (b) was over the age of 18, and (c) had a minimum of one year of experience teaching gifted students virtually. The criterion for participants was established to ensure the phenomenon would be addressed.

Recruitment for the study was done via initial email to all teachers in the site accompanied with an interest survey form to address the criterion and demographic information

to ensure saturation was met (see Appendix G). Teachers who responded with an interest in participating were provided with a copy of the informed consent form (see Appendix F). Once informed consent was received, participants were sent an invitation to schedule an interview. Each participant was provided a pseudonym to be used for ethical considerations. During the interview, requests to complete the journal prompts as well as for documentation in the form of lesson plans, PLC notes, professional development, and other documents the participant felt were pertinent to the experience. Other documentation was obtained via email.

Descriptions of Participants

Following are individual descriptions of each of the ten participants for the study. Pseudonyms were used to protect their identity.

Kathrine. Kathrine was a Caucasian female in her 40s. She was a full-time teacher of English and Family and Consumer Sciences. She has a master's degree and is a certified in English while she has a background in both special education and family and consumer sciences. She had been teaching for 10 years with three years of experience working with gifted students, and one of those years was virtual. At the time of the study, she had gifted students in many of her classes.

Whitney. Whitney was a Caucasian female between the ages of 45-55 years of age. At the time of the study, she was a full-time special education teacher. She has a master's degree in the area of special education. She also has experience in teaching at the secondary level for the past 22 years. Linda had several years of experience co-teaching advanced courses for gifted students with one of those years being virtual instruction. She was working with gifted students in the classroom at the time of the study.

Kelly. Kelly was another female teacher in the 46-55 age range. She indicated her race as White/Caucasian. She held a bachelor's and master's degree in secondary science instruction and had taught a variety of science and health courses at the middle school level. Kelly had been teaching between 23 years and had 21 years of experience working with gifted students in the classroom. At the time of the study, Kelly had taught gifted students virtually.

Tony. Tony was a male Caucasian between the ages of 40-50. He held a physical education teaching certification during the time of the study. He taught middle school physical education for 16 years and had worked with gifted students all of those years, and had gifted students in his class at the time of the study.

Kevin. Kevin was a male, Caucasian teacher between the ages of 46-55. As a 21 year veteran teacher, Kevin, a English and History teacher, held both a bachelor's and master's degree. At the time of the study, he was working on doctoral studies in higher education. Kevin had taught a variety of subjects on the secondary level, including experience teaching gifted students. While at the time of the study, he had been 21 years' experience working with gifted students both face to face and virtually, he is the technology integration specialist and was not teaching in the classroom currently. However, he had experience in the past of more than one year; thus, he met the criterion for a participant in this study.

Lydia. Lydia was a Caucasian female between the ages of 46-55. She held a Masters in Administration and Supervision and was working toward a Doctorate in Curriculum and Supervision at the time of the study. She was a middle school social studies teacher although she has additional experience teaching elementary school. She had 32 years of experience teaching various levels and served as the gifted and talented liaison at her school. At the time of the study, she had experience working with gifted students in her classroom as well as online.

Kerri. Kerri was a Caucasian female between the ages of 46-55. She held a Bachelor of Arts degree in both Spanish and French, a master's degree in Spanish as well as other various other certifications and credentials in the field of foreign language. She was a trainer for the for English teachers in Madagascar with the United States Peace Corps, a librarian, as well as a French, Spanish and ELL teacher in both secondary and higher education. She had 20 years of experience teaching various levels in different states. At the time of the study, she was teaching elective content courses in both French and Spanish and had current experience working with gifted students in her classroom as well as online.

Lorelai. Lorelai is a female teacher in the 35-45 age range. She indicated her race as White/Caucasian. She held a master's degree in secondary mathematics instruction and had taught a variety of math courses at the elementary, middle school, high school and college levels. Lorelai had been teaching between 15 years of experience working in blended classrooms where gifted students were present classroom. At the time of the study, Lorelai had taught one year of online advanced math courses that included gifted students.

Alex. Alex was a male, Caucasian teacher between the ages of 35-45. As a 18 year veteran teacher, Alex, a Science, held both a bachelor's and master's degree. At the time of the study, he was teaching 8th grade science but had previously taught music/chorus. Alex had taught a wide range of students, including having experience teaching gifted students. While at the time of the study, he had gifted students in his classroom and had additional experience working with gifted students virtually.

Table 3

Teacher Participants

Teacher Participant	Years Taught	Highest Degree Earned	Content Area	Grade Level
Katherine	10	Masters	English	6th
Whitney	22	Masters	Special Education-All Content Areas	8th
Kelly	23	Masters	Science	8th
John	16	Masters	Physical Education	6th - 8th
Kevin	21	Educational Specialist	Social Studies	8th
Lydia	23	Masters	Social Studies	7th-8th
Kerri	20	Masters	Foreign Language	7th - 8th
Clara	15	Masters	Science	8th
Lorelai	15	Masters	Math	6th
Alex	18	Masters	Science	8th

Results

The shared experience that emerged from the analysis was that teaching virtually was a complex emotional experience for the participants. The experience is rooted in both positive and negative attitudes toward teaching online, as well as a large range of efficacy differentiating instruction to meet the needs of gifted students. The experience was also rooted in the level of confidence in working with the online tools without training to incorporate differentiation strategies and maintain student engagement. From the analysis, three themes emerged, including

giftedness in the classroom, the challenge of teaching virtually, and attitudes and beliefs toward differentiation. There was one outlier in the data: teachers' passion for helping students.

Giftedness in the Classroom

The district, at the time of this study, was working address the structural inequity and educational inequality in gifted and advanced learner programs. Currently, students who have been identified as gifted and talented only account for 17% of the school district's student population and there is limited gifted personnel and instructional service support. Therefore, the district has considered it important for teachers to gain knowledge concerning gifted programming. One of the biggest push backs in eliciting participants is the idea that middle school educators did not teach gifted students. However, within the school district, gifted students are infiltrated within general education classes. Each middle school has a gifted and talented liaison that communicates which students are gifted with the purpose of enriching their learning experience. While at the middle schools, classes are not leveled, teachers within the district have been trained based on the tiered level of instruction, where whole group receives tiered one instruction. While teachers were thinking of tiered one instruction from the bottom up, differentiation and project-based learning does occur within tier one (Han et al., 2014). At a recent professional development, educators were encouraged to start planning with the gifted students in mind and then building in scaffolds so that everybody can access that high level of critical thinking. The school district has adhered to COMAR requirements (Maryland State Department of Education, 2019); that each local school system shall establish an equitable process for identifying gifted and talented students that encompasses all students. However, this does not include understanding who the gifted and talented students are to provide equitable instruction. In her interview Lorelai stated, "Teaching gifted and talented students has never been

at the forefront of education. With multiple levels in the class, it is expected to teach to the bottom. It is always the focus of administration and supervisors to 'move the bottom' to a passing level versus moving the top, because they are already capable, so they get left out majority of the time." Eight out of the ten participants felt that the district has not properly equipped educators to lesson plan with the gifted student in mind.

Gifted Students and Accommodations

Of the ten participants, nine had gifted students in their classes at the time of the interviews, but all participants had taught gifted students online during the Covid-19 pandemic. I was able to obtain Gifted enrollment information from the district that provided breakdown of gifted student per school as well as requirements to be enrolled in the gifted program. Gifted and talented students accounted for 22% of the student population at the two sites in which this study was conducted which is 5% above the district average. Gifted and talented enrollment is based on the administration of the CogAT (Cogitative Abilities Test) national test in both 2nd and 7th grade, and students are tested in February each school year. Students that score a stanine of eight or nine (the highest scores possible) in one of the categories, verbal, nonverbal and quantitative, qualify for gifted programming. Due to the district being highly transient area, a new student between these grade levels is given the test in February when the test is administered to these grade levels. Enrollment in the gifted and talented program is not limited to CogAT testing, but also compasses scores on the MCAP (Maryland Comprehensive Assessment Program) state testing, MAP (Measurement of Academic Progress) a computerized adaptive test that measures academic growth and achievement, as well as teacher recommendations. In the district, MCAP is administered in the spring, but the results are not published to the school until the following school year. However, MAP is given quarterly in both Math and English language Arts. If

students score within the advanced range (230 or higher) and have a teacher recommendation, they can be reviewed for the gifted and talented program. According to the document data, Katherine, Whitney, Kelly, Tony, and Kerri knew the gifted students in their classes at the time of the interviewing process, while Lydia said that her school does not track the gifted students, but she knows that some are present in her classes. Lorelai, Clara, and Alex agreed to this statement. This showed a discrepancy at the site level in the identification of gifted students. One site provides teachers with the students per class that have been identified as gifted and talented, while the other site does not share this practice. In the state of Maryland, students that qualify for the gifted and talented program are not provided with IEPs. While all gifted students required some form of accommodation to extend their learning, students do not have gifted and talented educational plans like other states. The district, however, began to institute teacher professional development, post-pandemic to support teachers in the identification process. Professional development included, identifying gifted students in the classroom, understanding what giftedness is according to COMAR (Maryland State Department of Education, 2019), and how to begin differentiating, questioning, and challenging the gifted student. Katherine, Tony, Kelly, and Kerri discussed these trainings in their interviews.

The Challenge of Teaching Virtually

Most of the participants expressed the difficulty teaching online during the pandemic. The engagement aspects, relationship building, and lesson planning are themes of the brick-and-mortar environment that was difficult to replicate during virtual instruction. Additionally, navigating the required technology and the experimentation of other platforms increased the demand on lesson planning. These feelings were reflected in both the participant interviews and journal prompt responses. In her interview, Kelly said, “Teaching online is more difficult than I

think people realize, and it's not like holding a business meeting, but you're trying to hold the attention of 28 kids while trying to reach many different ability levels in a single time frame." She continued to explain that teaching virtually tested the teacher's ability to reach students in a nontraditional way. When asked about her experiences teaching virtually, Whitney jokingly said she experienced a flashback of terror, but she continued by saying it was challenging to make the connections necessary with students to increase their motivation.

The Challenge of Technology

During the pandemic, the district required teachers to use the learning management system called Schoology to house all curricular items within folders for students to access. Additionally, students and teachers had access to the Microsoft Office suites programs that include Office, Word, PowerPoint, Excel, Publisher, but also Microsoft OneNote. Within this technology students had the ability to work collaboratively, and teachers could provide feedback in real time. Through Microsoft Teams, teachers and students would meet during a live synchronous lesson. However, teachers were accessing other technologies to increase classroom participation and engagement. These technologies included but are not limited to Nearpod, Pear Deck, Lumio, Padlet, Jam Board, YouTube, Interactive Whiteboards, Ed Puzzle, Voice Thread and Flip Grid. Tony expressed that teaching online "was really challenging. It definitely had me thinking and constantly looking for stuff to engages them as best I can." Clara expressed in her interview that it was difficult to figure out the technology pieces, and having to rethink the way teachers present the content. As a technology integration specialist for the district, Kevin expressed the need to minimize the technological challenges of accessing the curriculum virtually. He reflected on other possible barriers to access students may have. He said, "We have to remove barriers to access by having platforms that have as few barriers as possible." He

continued, “Teaching virtually provided a freedom to explore what education can do beyond the four walls of a brick-and-mortar school that the pandemic allowed and we're going to have rethink what we do in a typical four walled classroom.” While the teaching online was a challenge and constant struggle for many of the participants, Clara mentioned in her interview that it did make her rethink how she presents classroom materials and many of the strategies she used during online instruction, she still uses today in the face-to-face environment. The pandemic transformed the educational experience for all students because teachers were forced to learn new lesson delivery platforms.

The Challenge of Online Engagement

The struggle of student engagement during a synchronous lesson echoed in the participants interviews. While the participants did not know the exact reason engaging students online was so difficult, it was their belief that the high distractibility was a main factor. Kevin expressed what it was like teaching online in his interview. He said, “The level of engagement is almost impossible to replicate in an online environment. I mean, no matter how engaging you of a speaker you are, no matter what type of YouTube, podcasting personality you might have, it's still like anyone watching an entertainer on a on a screen, you're simply just consuming what that entertainer is delivering.” In her interview, Katherine expressed the stress of teaching virtually. She explained, “There wasn't as much visible engagement. I did develop some techniques and tricks to get kids to participate every couple of minutes to make sure they were actually listening, but it was hard.” However, she continued to explain the difficulties of teaching virtually. She said, “The hard part was keeping track of the students’ progress, keeping track of the students themselves, helping them to engage. A big part was not being able to see their faces and body language. All those kinds of things just really impacted how you as a teacher engaged with the

kids." In their interviews, it was expressed that teachers were fighting against video games, movies/TV shows, and other distractions at home for their students' attention. They also expressed that it took a lot of energy to keep students on track of their learning.

Attitudes Toward Differentiation

Most of the participants expressed positive attitudes and beliefs about differentiating lessons and assessments with the goal of challenging and extending the content for the gifted and talented learner. Kelly explained her feelings towards differentiation in her interview. She said, "If you're gifted, it doesn't always mean that you need more work. You need work that is going to challenge you to think outside of the box, to step outside your comfort zone." The positive aspects are themes of differentiation as a practice already in use in the physical classroom and an overall belief that gifted students need to be challenged. These feelings were reflected in their both their interviews and journal prompt responses.

Many participants indicated that they were comfortable with differentiating lessons and assessments for all students. Whitney explained her feelings by stating, "All students are unique individuals with talents, strengths, and abilities that should be encouraged and fostered through a variety of challenges. The educational environment should be welcoming and safe where students feel comfortable asking questions, seeking new experiences, and learning to make mistakes. If the lessons in the classroom are not differentiated, the gifted student may become bored and act out. Also, the gifted student needs to experience challenge that leads to exploration and sometimes failure so that he/she learns how to handle a challenge or failure." Kerri, too, shared that she felt differentiation was an integral part of her teaching methodology when she said, "I believe differentiation is important for all levels so that each student feels that they are working appropriately to their level of learning." Kevin explained if teachers learn how

to differentiate their lessons for a gifted learner, then they could differentiate for all learners. "I still expect students to understand that whatever that content might be in any content area, but if you can communicate it to gifted students, in the sense that it's part of the content you're not expecting the rest of your class to be ready for yet, then you're differentiating in the classroom," Clara explained in her interview that she was able to differentiate her lessons through project-based learning. She said, "I did a lot of projects in virtual. I was able to scaffold who was assigned what type of project or the project question. Gifted students would receive a more challenging problem or less scaffolding, so they spent more time doing research on their own." Kelly also mentioned in her journal prompt the connection between differentiation and project-based learning.

Ambiguity of Planning Instruction for Gifted Students

While there many expressed a positive attitudes and beliefs towards differentiation, 6 out of the 10 of the participants felt that differentiating for a virtual class is difficult as it takes a lot of time. Additionally, they commented that while they have been trained to scaffold lessons for the bottom 10% of the class, they are not completely confident planning lessons with the top 10% in mind. Katherine expressed in her journal prompt, "I think our problem in education is that we either only differentiate instruction for the low kids or we think differentiated instruction for the high kids is extra work." While many of the participants agree that gifted students do not need more work, they just need to go deeper into the content. However, the need for time and the assistance of a certified gifted and talented teacher to plan lessons that meet the needs of the high achieving student is echoed in both the participants journal prompts and interviews. Additionally, teachers expressed the extent of time just needed to plan for whole group instruction through the virtual platform was a challenge. Whitney expressed that she would have to think about each

element in the lesson prior to synchronous lessons. It is a common belief that teaching virtually changed the way teachers think about lesson delivery, however teachers still lack the confidence to extend the learning for the gifted population.

Need for Professional Development

The participant journal prompts echoed the need for professional development to properly differentiate and modify instruction for the gifted learner. While the district has provided four different professional development sessions geared toward the identification of gifted students, only one session provided strategies to increase rigor in the classroom. This professional development was focused on Costa's Levels of Questioning. However, Kelly said, "Professional development is a band-aid approach to properly educating these students." Participants stated that they have had numerous trainings focused on modifying instruction quickly and easily for struggling learners, but not for the gifted learner. Clara stated, "I feel like we spend a lot of time talking about scaffolding for our special education learners, but not for our gifted and talented learners." The participants agreed that the content usually comes easily for gifted learner, but they wished for professional development geared to tangible classroom strategies to increase the productive struggle in learning.

Changed Approach to Teaching Post-Pandemic

Interestingly, teachers' pre-pandemic taught the way they were instructed; teacher-led instruction with some group work. Many lessons taught during a synchronous lesson were teacher-centered and directed to the whole group, but teachers did discover new ways of delivering content instruction. Post-Pandemic teachers reported using multiple styles of presenting information as well as considering the backgrounds of students and how that may impact their interaction with the teacher and the content. Since teaching online, the participants

reported moving toward a more student-centered approach to teaching and learning. In his journal prompt, Alex stated he had begun to flip his classroom, giving students a chance to explore the content first and make their own conclusions before direct instruction. Kerri stated, "I have planned so that students are more independent and self-paced in completing activities, have choice, and can work in pairs, groups or independently. I plan lessons for blended learning, providing a balance of online and regular classroom activities." The participants confirmed elements of collaboration, creativity, exploration, and independent research are weaved throughout their lessons and methods of instruction. Clara explained that her experience teaching online somewhat influenced her philosophy of teaching. She stated, "I am here to facilitate learning; put more ownership on the students for their learning." While Kerri said that teaching through the pandemic gave her "a better handle on the content and curriculum, so I I'm more aware of what types of things I could pull out that could be more interesting to them."

Outlier Data and Findings

One unexpected finding and theme that did not align with specific research questions include the teachers' passion for helping students to meet students at their level in the virtual environment. While this theme did not answer the research questions, but it did encompass participants experiences with the phenomena. This form of differentiation took place outside the regular school hours and was provided for the struggling learners, some of which were gifted.

Teachers' Passion for Helping Students

Teachers have a clear passion for helping all students, particularly those who were struggling through the virtual environment. When asked in the interview "Describe a time through virtual instruction in which a student is not reaching their full potential and your reactions to this scenario?" Teachers responded by saying encourage them, check in with the

student, pull them into small groups for individualized instruction, individual student conferences, and informal assessments to gauge their level of understanding. Kevin, Kelly, and Kerri discussed times they would hold meetings with struggling students outside the school day, as well as, holding tutoring sessions online for students that were struggling. Lorelai stated in her interview, "A student never turned on their camera, never showed up to class, and would barely do any work. I would speak to them online numerous times, but their camera was off so I could never get full participation or communication from him. I was very hurt and disrespected. Administration would constantly ask what I was doing to support this student, and I felt I did everything in my power to help him. It was the student putting forth no effort." Stories like this example were given by each participant during their interviews.

Meeting Students on Their Level

Teachers agreed that virtual learning limited their connections with their students. Their classroom warm-ups became a social-emotional piece in which teachers were trying to make that connection virtually. Relationship building was a difficult piece that was expressed by Whitney, Tony, and Kerri. Whitney said that the decreased ability to build relationships virtually limited the teacher's ability to really know their students, including their interest, strengths, and weaknesses. Teachers agreed that students have different access points to the curriculum. These access points are based on experiences and prior knowledge and help students make meaningful connections to the curriculum. Kelly stated in her interview, "A poor achieving student is one that struggles in being able to make connections between new information and prior knowledge and being able to apply that information to something completely different." The most successful approach to differentiation is finding out what prior knowledge students have in the classroom prior to concept instruction. During the pandemic, building the relationships required

to prompt these access points were limited and made meeting students at their level a challenge. Kerri stated, “My first reaction is always reflecting on how have I taught what type of activities have I included and what else could I or should I be doing differently because I feel like I'm the one who's responsible for guiding the kids through the lessons and hopefully learning the materials best as they can, but at some point, realizing just the complications, the lack of connection not being in person with students made it extra challenging.” Despite this challenge, teachers agreed that tried everything they could to help students achieve success, but teaching online makes it difficult to ensure that all students are being reached.

Research Question Responses

This section offers the reader concise answers to the research questions to prime them for the discussion that will follow in Chapter Five. This section supplies short and direct narrative answers to each of the research questions, using primarily the themes developed in the previous section. Participant quotes will be use to support the responses to the research questions.

Central Research Question

The research question is the basis of the entire phenomenon exploring the lived experiences of classroom middle school teachers working with gifted students. These experiences were analyzed from a point of understanding the background of the participants in their own educational experiences as students and philosophy of education. These aspects were important as research supports the impact of prior experiences affecting one’s perceptions and experiences with a specific phenomenon (Davis & Forbes, 2016; Gilakjani & Sabouri, 2017). The main research question for this study was “What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?” The answer to this question is best approached

through a discussion of the sub-questions. The sub-questions are as follows: How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually? How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners? The participants' perspective is that differentiation is important for all levels so that each student feels that they are working appropriately to their level of learning. Differentiation is not designed to give gifted students more work, but to allow them to gain a deeper understanding of the content and keep working while the rest of the class works at a different pace. While teachers believe that differentiated instruction is important, they lack the efficacy to develop lessons that are polarized. Clara stated, "Gifted students really seem to thrive when given a chance to write things out instead of just answering questions. They explain and go into detail a lot which really expands their learning. Giving them a challenging problem engages them to explore and problem solve." However, teachers feel that are not given the time, the training or support to differentiate their lessons with the gifted student in mind.

Sub-Question One

Sub-question one was: How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually? This sub-question addressed the individual participants' sense of efficacy in working with gifted student virtually. This question was important to address one of the theories of this study, the sense of efficacy, as framed by Bandura (1997). This question was answered primarily through an analysis of the interview data and journal prompt responses. Certain factors influenced the sense of efficacy for participants and led to the developed themes. The factors affecting the sense of efficacy included established technology, the support of a co-teacher,

student engagement and relationship building, and the need for professional development. The themes that emerged were centered on the dependence of efficacy on supports available and strategies known.

Through the pandemic, many teachers began to develop new strategies and techniques to make virtual instruction easier and to increase effectiveness of lessons. Through this experience each participant had gained knowledge in their fields of expertise, worked through the complexities of technology, but also was demanded to reach their audience. There was the mechanical and practical challenge of trying to figure out which tools would best meet the needs of both the teacher and the students and deliver instruction that is within the curricula when the mode of content delivery was the computer. Using already established programs like Apex and Summit really increased the efficacy of teachers, especially during the on boarding process of virtual learning. Kevin stated, "Apex is an online platform that has an interactive component, where students would be able to read content, for instance, and be able to highlight features or underline vocabulary that also had questions that were both selected response and short answer. Students could go through lessons at their own pace and the content was aligned with both Maryland and National standards. It was a program that would not have required teachers to tap into their creativity." Kevin stated that with the help of Apex, he could start planning with the gifted in mind and then building in scaffolds so that everybody can access that high level of critical thinking and rigorous learning. Alex credited his efficacy of teaching online to the Summit program. He stated, "The way that Summit worked was that the lesson plans were prebuilt for us in a digital space and incorporated a lot of independent work. So, transitioning into that digital space was much easier." Working with Summit really gave him the confidence to explore other platforms and opportunities to support students virtually. However, not every

teacher had access to these platforms and had low efficacy delivering content while trying to figure out the technology piece. The teachers that had access to both Apex and Summit had higher efficacy.

Another factor that affected the sense of efficacy of the teachers involved was that of the support of a co-teacher. Most felt that their efficacy was higher when they collaborated with a special education teacher. Kevin shared, "Many times the strategies introduced my Special Ed colleagues were sometimes appealing to my gifted learners because it caused them to think about concepts differently and even develop skills in a more thoughtful way." According to Whitney, "There is a vantage of working with another teacher and planning. So, we would meet after hours and look at the curriculum, and we would look at our student body and we would say what would this student need to access the curriculum? Do we need to build scaffolds? It's a huge advantage having another teacher" Kelly shared the same sentiment, "My colleague and I would plan together. We would walk through the lessons. We would include one of the special Ed teachers in the process so that we were not only addressing the general education students, but we also had supports in place for the students that had IEP. We also included some enrichment activities for the students who were identified as gifted and talented, or students that were not necessarily gifted and talented but were excelling with the current academic level of work." Clara, too, credited collaboration with the special education teacher for increasing her sense of efficacy, "Having that extra person really helped. If I didn't have her, my lessons and assignments would probably not have been leveled as much."

Additionally, the levels of efficacy for many of the participants were linked to the level of relationships they were able to form with the students. The stronger the student/teacher relationship, the teacher had a higher degree of confidence that their students were learning and

that their instruction was effective. Kevin stated, “teaching starts with building relationships and designing instruction to be as engaging as possible.” Whitney and Kerri agreed that the student/teacher relationship was key to tailoring the instruction. Tony, Katherine, and Kerri shared that their daily warm up was continual icebreaker just to check in with students, to see how they were doing emotionally, and just trying to make that connection virtually. They shared those students who made that connection online did better in terms of achievement. Whitney stated, “The relationship building with the students really impacted the learning in the classroom.” Kevin stated, “I was committed to not letting that happen but if I'm honest with myself. There were students I simply was unable to reach. Every teacher will have students over the course of their career that just, for whatever might be happening in that students’ lives, may resist any kind of overtures of a committed educator to reach them, even in the face-to-face setting. I would say that that those numbers increased during online learning. Online learning allowed students to check out because they did not have the physical presence of the authority figures.” Not being able to ensure the learning of students decreased the efficacy of the teacher. Through virtual learning many of the teachers indicated that they were just unable to reach all students and that had them constantly thinking and creating new ways to draw their students in, but it made them question their effectiveness as a teacher.

The final factor affecting the sense of efficacy for teachers was the level of training or professional development they received. Many participants felt that they were inadequately trained to extend the learning for the gifted population. Many teachers expressed having to find information or resources to implement strategies in the classroom to excel the gifted learner. For Kerri, “The only training I’ve had for gifted recently is what has been presented during staff trainings.” Alex stated, “I haven’t received any specific training in working with those students.”

He continued, “I was never really encouraged or trained on how to approach the differentiation of virtual learning, I think modifying things like I always do in the classroom prepared me to some degree. In general, I don't feel like I've gotten much training at all focusing for the gifted, modifying things for the gifted learner, whereas it's always kind of on the low end. A lot of people say, well, just give them another assignment, and I know that's not the way we want to do it. So, it's just I feel like we know so many ways to help a student approach the material, but we don't know much about the strategies we can put in place to help the student that's gifted. That’s something that I feel like I’ve had to explore on my own.” The lack of strategies for gifted students was the cause for low sense of efficacy. Kelly, too, desired training to increase her confidence; “When working with gifted and talented students I feel that I do them a great disservice due to my lack of training in how to teach students of high academic caliber. Much like special education, proper certification and experience is needed to hone this craft and I feel the same way about gifted and talented.” Many of the participants desired more training and professional development concerning strategies and resources that they could use to challenge and extend the learning for the gifted population.

The factors addressed above directly led to the development of the themes. The theme most prevalent in answering this research sub-question was that of confidence in knowing what strategies are appropriate for gifted instruction and differentiation. An individual might claim a high sense of efficacy associated with one factor, but then allude to an underlying low sense of ability to support these students.

Participants who felt they knew strategies to support this population felt a higher sense of efficacy than those who did not. For example, Whitney, Clara, and Kelly explained that project-based learning is an instructional practice they used in working with your gifted students, and

they were confident in their ability to differentiate using this strategy. Through project-based learning teachers had the ability to scaffold the assignment and question (Han et al., 2014; Hmelo-Silver, 2004; Karademir, 2016). Kelly explained her experience with project-based learning as providing "a way show how they came to their conclusion, or their answer, or their method of solving a problem."

In contrast, other participants were concerned by a lack of strategies for differentiating instruction and shared lower senses of efficacy because they were not trained. However, teachers expressed a desire for researched-based strategies that they could implement into their classrooms. Kerri shared that she wishes the district would provide professional development that would train teachers on "the current strategies for lesson/activity planning for gifted students." Lorelai felt like she did not have the resources available to help her gifted students. Additionally, Whitney share that she does have the strategies for helping "students learn that when they do struggle or when they do meet a challenge or if something does not automatically come easily to them" She continued by stating she would like training on what to do in these situations.

Sub-Question Two

Sub-question two was: How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners? This question addressed the underlying attitudes and beliefs held by participants that might affect the phenomenon. Attitudes and beliefs are an underlying element of efficacy (Zee, Helma & Koomen, 2016), and was important to an analysis of the experiences of the participants. The themes that developed regarding attitudes and beliefs are basically defined as positive and negative. Positive themes were expressed as feelings that differentiation is already a part of practice, positive student

experience, the resiliency of the challenge for students, and its importance in the classroom. Negative themes were focused on the great deal of work and time above and beyond what is normally required, staffing constraints, and lack of training. Some participants fell on either positive or negative; however, most participants were contradictory about their attitudes and beliefs. Throughout the theme development and triangulation process, there was a relationship between attitudes, efficacy, and practice.

Many participants indicated that they believed lessons and assessments should be differentiated for gifted students. Kerri felt that "Differentiation is important for all levels so that each student feels that they are working appropriately to their level of learning." Katherine, too, felt that "Our problem in education is that we either only differentiate instruction for the low achieving kids or we think differentiating instruction for the high achieving kids is extra work." Perhaps, Lorelai said it most succinctly when she remarked, "Instruction should be differentiated."

In further support of positive attitudes and beliefs, several participants shared experiences of how differentiated lessons really allowed the students to build on their funds of knowledge and challenge each other. Some of the participants agreed that instruction should be differentiated to provide for deeper learning to happen for students on the same cognitive level. Kevin's experiences in with differentiating instruction for gifted students by pairing them with one another, provided a deeper understanding of the content standard they had already mastered. He stated, "I would pair students especially when they have divergent talents to occasionally allow them to challenge each other's thinking." Kelly experienced this same phenomenon. She found a great value in purposeful grouping of her gifted students. She said, "There is a great value in partner and small group work, especially with projects. When students can collaborate

with one another, they can learn/understand science concepts in a more simplistic way. Students can share ideas and, in some cases, dispel misconceptions relating to a science concept. Students also learn new skills from one another such as video editing, creation of multimedia projects, and graphic design." Kelly stated that in her experience, gifted students produce well thought out and executed projects. Clara also experienced an increased depth to students understanding of the content when assignments and assessments are differentiated. She said, "Gifted students really seem to thrive when given a chance to write things out instead of just answering questions. They explain and go into detail a lot which really expands their learning. Giving them a challenging problem engages them to explore and problem solve."

However, there were negative aspects of differentiating for gifted students. Many of the participants expressed planning differentiated lessons require too much work, and they are not given the time or instruction. From Katherine, we hear, "The problem is time to plan." She stated in her journal prompt that differentiated lessons and projects takes a lot of time to plan and it not always feasible. Kelly really felt strongly about needing the support from a certified gifted and talented teacher when it comes to planning differentiated lessons. She said, "I honestly feel that certified gifted and talented teachers should co-teach general education teachers, just as special education teachers co-teach in the general education classroom. I feel that these students would receive the much-needed services to extend their learning and push them towards a more challenging and rigorous curriculum. With that said, I also feel that there should be a separate gifted and talented curriculum." This statement came after discussing the various levels in the classroom. According to all participants, the cognitive level in the classroom ranges from students who are talented, are quick to pick up on content, to students who really struggle, have significant difficulties with reading or processing information. Planning lessons that encompass

all these levels and provides the proper access point for each level was overwhelming. As Alex said, “Much like we should differentiate the work we do with struggling students, gifted students should be approached differently.” Alex also shared, “Although I’ve had many gifted students in my time, I don’t feel like I’ve ever purposely modified instruction in a meaningful way to best support them. I’d love to be more comfortable doing that.” However, in his journal prompts he stated, “I wouldn’t say I change my instructional practices much with my gifted students as much as I take away some of the supports, I provide to my students that aren’t as gifted.”

One final negative theme that emerged from interviews regarding attitude was that of not being trained to properly challenge the gifted learner. According to Lorelai, “I was never truly trained, so I go off of assumption.” Alex concurred saying, “I haven’t received any specific training in working with those students (gifted and talented).” He continued, “I’ve been trained in several ways how to modify my instruction quickly and easily for struggling learners. I’d like to feel as comfortable doing the same with gifted learners.” Kelly echoed this belief. She stated, “When working with gifted and talented students I feel that I do them a great disservice due to my lack of training in how to teach students of high academic caliber.” Overall, there is a desire from the participants to provide gifted students with quality instruction that extends their learning.

Despite evoking some negative attitudes, the themes that emerged in response to sub-question one were predominantly positive. While lack of training was seen as a deficit that caused many difficulties on the part of the teacher to differentiate lessons, the participants held mostly positive attitudes about the experience. They were strong in their overall belief that all children can learn, teachers need to teach the kids that are present, and gifted students were no different.

The answers to sub-question two regarding participants' attitudes and beliefs about differentiating instruction and challenging gifted learners indicated that there is a strong dependence on many factors that affect a teacher's sense of efficacy. Some of the participants attitudes and beliefs were centered around the daunting tasks of organizing group projects, designing productive group work experiences, judiciously placing students with peers for optimal collaboration and output, and time management while considering themes of equity, workload, and academic goals. Teachers feel intimidated and insecure due to great deal of work and time differentiation requires, staffing constraints, and lack of training concerning classroom strategies geared to the gifted learner.

Table 5

Research Questions and Themes

Research Questions	Corresponding Themes	Participant Quotes	
RQ1 : What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?	• Differentiated Instruction • Planning • Professional Development	"Gifted students really seem to thrive when given a chance to write things out instead of just answering questions. They explain and go into detail a lot which really expands their learning. Giving them a challenging problem engages them to explore and problem solve." - Clara Interview	"I haven't received any specific training in working with those students. I was never really encouraged or trained on how to approach the differentiation of virtual learning; I think modifying things like I always do in the classroom prepared me to some degree. In general, I don't feel like I've gotten much training at all focusing for the gifted, modifying things for the gifted learner. That's something that I feel like I've had to explore on my own." -Alex Interview
SQ1: How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually?	• Established technology • Support of a co-teacher • Student engagement and relationship building • Need for professional development • Project-based learning • Differentiated instruction	"Teaching starts with building relationships and designing instruction to be as engaging as possible." - Keven Interview	"There is a vantage of working with another teacher and planning. So, we would meet after hours and look at the curriculum, and we would look at our student body and we would say what would this student need to access the curriculum? Do we need to build scaffolds? It's a huge advantage having another teacher" -Whitney Interview

SQ2: How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners?	Positive themes • differentiation is already a part of teaching practices • positive student experience • the resiliency of the challenge for students, and its importance in the classroom.	"Differentiation is important for all levels so that each student feels that they are working appropriately to their level of learning." -Kerri Interview	"Our problem in education is that we either only differentiate instruction for the low achieving kids or we think differentiating instruction for the high achieving kids is extra work." -Katherine Interview
	Negative themes • great deal of work and time above and beyond what is normally required • Staffing constraints • Lack of training.	"When working with gifted and talented students I feel that I do them a great disservice due to my lack of training in how to teach students of high academic caliber. Much like special education, proper certification and experience is needed to hone this craft and I feel the same way about gifted and talented." -Kelly Interview	"Much like we should differentiate the work we do with struggling students, gifted students should be approached differently. Although I've had many gifted students in my time, I don't feel like I've ever purposely modified instruction in a meaningful way to best support them. I'd love to be more comfortable doing that." - Alex Interview

Summary

In summary, Chapter Four presented a textual description of the participants' demographics. The chapter also revealed the results of the data analysis to determine the sense of efficacy of the participants in teaching and differentiating for gifted students. The themes from the data analysis were presented and include giftedness in the classroom, the challenge of teaching virtually, and attitudes and beliefs toward differentiation. There was one outlier in the data: teachers' passion for helping students. The chapter closed with the analysis of the developed themes and the research questions.

CHAPTER FIVE: CONCLUSION

Overview

In Southern Maryland the gifted and talented population accounts for 17% of the student body, however it is estimated that 15.8% children are enrolled in gifted and talented programs (National Center for Education Statistics, 2018). Nevertheless, in Southern Maryland, there is not push-in and pull-out services for these students, and they receive instruction in general education classrooms where there exists a wide range of cognitive abilities (Tomlinson, 2015, 2018). This group of learners requires differentiated strategies and modifications to be academically successful (Horak & Galluzzo, 2017; Peterson & Colangelo, 1996; Ridgley et al., 2020; Steenbergen-Hu et al., 2020), and engage in a curriculum that is consistent with their abilities to meet their pedagogical needs (Tomlinson, 2015). A high degree of diversity, wide range of skill and cognitive levels integrated into modern classrooms makes it merely impossible for educators to meet the unique needs of individual students while promoting rigor and challenge (Tomlinson, 2015; Tournaki, 2003). This issue alone has caused many gifted students to frequently receive the same instruction as their peers and spend most of the instructional time not disengaged and not learning (Rodriguez, 2016). With the Covid-19 pandemic in 2020 (Adedoyin & Soykan, 2020), the on boarding of virtual instruction increased the challenge to differentiate instruction for the gifted learner (Ridgley et al., 2020; Steenbergen-Hu et al., 2020). The purpose of this transcendental phenomenological study was to explicate the lived experiences of core academic middle school teachers with differentiating instruction and challenging the gifted learner in rural southern Maryland. The main theory that guided this research was that of social cognitive learning theory as defined by Bandura (1986, 1997). The social cognitive learning theory (Bandura, 1986; 1997) provides an understanding concerning how teachers actively shape and

are shaped by their environment. This theory reasons the influence of self-efficacy on the production of attitudes and beliefs. This theory addresses the role of self-efficacy in learning and the role of teacher efficacy in working with gifted students as an integral part of their shared experience. A second theory that contributed to the theoretical framework was the achievement-motivation theory of McCelland (1988). The connection between achievement-motivation theory (McClelland, 1988) and instructional strategies influences the role of efficacy in planning and implementing instructional strategies. This chapter presents an interpretation of the findings, including triangulation of the data, implications for policy and practice, theoretical and methodological implications, limitations and delimitations, and recommendations for future research.

Discussion

A summary of the findings begins with a summation of the demographics of the participants. Participants ranged in age from 35 to 56, with females representing 70% of the group. The participant pool was lacking in racial diversity as all identified as White/Caucasian, and ethnic diversity. Teaching experience ranged from 10 to 25 years in the classroom, and all were currently teaching or had taught gifted and talented students. All participants held a master's degree. The focus of the study was to determine how these individuals provided answers to the central research question of "What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?"

Interpretation of Findings

Findings from this qualitative research reveal that teachers need support and training to increase their efficacy teaching gifted students online. The use of digital platforms such as Apex

and Summit increase teacher efficacy because the lessons are pre-planned. This gives the online instructor the desired time necessary to implement strategies required to engage and extend learning for the gifted student. However, training on these strategies is necessary to further increase teacher efficacy. Other findings supported through this research include efficiencies from distributed staffing. The lack of a gifted and talented certified teacher on site or the support of a special education teacher decreases teacher efficacy.

Online instruction that takes place outside brick-and-mortar public schools can be an effective means for providing accelerated coursework to exceptional middle school students who are intrinsically motivated, however, remote learning may not be the best option for all gifted learners. Teachers indicated that the difference is that some learners tend to be more autonomous or self-directed and take charge of their own learning, while other students struggle with the complexity of learning online. Furthermore, Teachers indicated that students are more successful when provided opportunities to socialize and learn alongside likeability peers, and when lessons incorporate personalized learning through student-centered approaches to learning that include, choice, creativity, and collaboration (Patrick et al., 2007).

Summary of Thematic Findings

Teacher self-efficacy is linked to the amount of training and support teachers are provided. Teachers that exhibited higher self-efficacy not only had support from individuals, but from learning platforms that made lesson planning for virtual instruction easier. The teachers that exhibited a higher sense of self-efficacy implemented inquiry-based lessons through the virtual platforms that were differentiated to meet individual student needs. However, despite the level of self-efficacy, teachers believe that differentiated instruction is important.

Interpretation #1: Teacher Efficacy is Linked to Training and Support. Teachers feel that they are not equipped to meet the needs of diverse learners at the middle school level through digital platforms (Camcı-Erdogan, 2015; Dixon et al., 2014; Matheis et al., 2015). The use of digital platforms such as Apex and Summit did increase teacher efficacy because lesson planning was done for them. However, several participants were successful designing their own virtual lessons using strategies such as Design-Thinking or Universal Design for Learning to implement project-based learning virtually to support the gifted learner. These teachers had a higher sense of efficacy differentiating instruction exhibited behaviors associated with effective teaching for the gifted learner (Camcı-Erdogan, 2015; Dixon et al., 2014; Karademir, 2016; Matheis et al., 2015). These participants also had the support of a special educated teacher on site. With the collaboration of a special education teacher, participants indicated that having tangible instructional strategies geared to supporting all learners at varying levels were more confident in their ability to design differentiated lessons. Teachers felt that through the implementation of strategies, like project-based learning, they had a better ability to scaffold assignments and the level of questioning.

Conversely, those with lower senses of efficacy are more reluctant to engage in differentiated instructional practices due to their lack of training and support from a special education teacher (Camcı-Erdogan, 2015). Research suggests these differences among teachers' self-efficacy directly affects students' success and attitudes toward school (Camcı-Erdogan, 2015). Teachers indicated a real challenge building relationships with students through the virtual platforms to meet their pedagogical needs. Teacher self-efficacy, as well as their knowledge and attitude toward gifted students, might also influence the process of designing curricula instruction to engage these learners (Akgül, 2021). A higher self-efficacy leads to

higher teaching quality, and the use of more effective or innovative methods to better meet the needs of gifted students (Matheis et al., 2015).

Interpretation #2. Educators believe that Differentiation is Necessary. Educators recognize the difficulty in providing all students with access to specific learning activities that are individualized, and struggle to challenge gifted students while scaffolding instruction for struggling students simultaneously (Taylor, 2016; Tomlinson, 2015). Teachers share a common believe that differentiation is important for all learners and provides students with opportunities to access the content and demonstrate understanding in multiple modalities. Furthermore, teachers indicted that students excel when lessons incorporate personalized learning through student-centered approaches that include, choice, creativity, and collaboration especially when provided opportunities to socialize and learn alongside peers at the same proficiency level (Patrick et al., 2007). Therefore, teachers with positive attitudes and beliefs toward differentiation are inclined to design lessons that incorporate these elements (Camcı-Erdogan, 2015).

Teachers recognize the need to scaffold instruction for struggling learners, but the elements of challenge, critical thinking, student choice, and curriculum modification are difficult to incorporate into daily instructional practices (Taylor, 2016). Teachers indicted that they are not provided the time and resources necessary and feel ill-prepared to meet the diverse needs of their students. Therefore, it is important to understand that a teacher's self-efficacy in teaching gifted students is directly linked to their implicit attitudes and beliefs toward differentiation and ultimately influence their classroom interactions (Akgül, 2021). Therefore, fostering the adequate inclusion of gifted students in mixed-ability classes involves the strengthening of teachers' self-efficacy (Akgül, 2021, Camcı-Erdogan, 2015).

Implications for Practice

The district is committed to the fundamental principles of equity and excellence in identifying and serving Gifted and Advanced learners. To ensure continuing education for these learners, gifted and talented liaisons are located at both sites with the purpose to provided enrichment opportunities for all students and extends learning for students who are identified as having advanced academic ability. However, this study indicated that teacher efficacy was increased with the support of a special education teacher. Within the district, special education teachers support teachers with the scaffolding of lessons for students who hold individual educational plans and are not present to support the gifted learner. The district does not have certified gifted and talented teachers present at the sites to support teachers in differentiating instruction or planning lessons with the advanced academic ability in mind.

Implications for Practice

With an increased focus on making the classroom more flexible to meet the needs of all students, especially those that are identified as gifted, teachers need to make differentiate an integral part of their instructional practices. Also, to address the different learning styles of the students, it may be beneficial for schools to incorporate certified gifted and talented teachers at the site level. Though this study did not reveal a significant difference when lessons and activities were differentiated through a virtual platform, teacher efficacy developing lessons that encompassed all learners increased with the support of a co-teacher. This was noted by the analyses of Sub-Question 1. The findings related to this question indicated an increase in the participants' self-efficacy for planning with the gifted student in mind. While there may not be an immediate increase in the students' academic performance, the increase in teacher effectiveness delivering curriculum and instruction geared towards the gifted student will benefit

all learners. It should be noted that this study was implemented in two middle schools in a district in Southern Maryland. It would benefit this district, as well as others, to incorporate the presence of a certified gifted and talented teacher at all sites since teacher efficacy planning and implanting differentiated lessons with the support of another teacher increased.

Theoretical and Empirical Implications

The two theories that guided this study were the Social Cognitive Learning Theory as defined by Bandura (1986, 1997) and Motivation theory of McClelland (1988). These theories were appropriate as they both attributed the learning experiences and interactions between the learner and the instructor while addressing the educator's efficacy in challenging gifted learners within the virtual classroom. The education of the highly able students is rooted in both cognitive and achievement paradigms.

Theoretical Discussion

Although virtual instruction has posed many challenges, an understanding of the factors that contribute to the participants efficacy to adequately differentiate the curriculum to promote critical thinking and extend student learning is important to understanding how gifted students respond to digital learning (Adelodun, 2017; Pots & Pots, 2017; Sawchuk & Sparks, 2020; Winebrenner, 2012). From the data, there appears to be a strong belief among the participants in the importance of differentiating instruction for the gifted learner. Many participants agreed that the gifted learner needs to be challenged in the classroom environment. However, teacher efficacy developing differentiated virtual lessons varied depending on teacher support and online programming. Participants were also unsure of how to plan with the gifted student in mind and then scaffold for other students virtually. Much emphasis was placed by the participants on the need to differentiate to accommodate for wide range of cognitive capabilities (Tomlinson, 2015),

but did not have the time or the training to do so. Consequently, gifted students received the same instruction, assignments, and expectations as their peers in the virtual environment (Rodriguez, 2016). Therefore, teachers felt that they did not have the support or strategies necessary to develop high-quality, differentiated instruction that meets the pedagogical needs of gifted students without neglecting the range of abilities present in the classroom (Tomlinson, 2015, 2018). Many participants shared a sense of failure as they believe their lessons are a disservice to the gifted learner. While federal law does not mandate schools to provide the necessary programs or accommodations for gifted and talented students during the school day, educators agree that they are not meeting the needs of the gifted student in the integrated classroom (Zirkel, 2009). In addition, participants agree that they have not received the training necessary to challenge gifted students while scaffolding instruction to meet the needs of struggling students simultaneously through instruction (Tomlinson, 2015). This research showed a strong correlation between self-efficacy and personal belief and attituded toward differentiation. Social Cognitive Learning Theory as defined by Bandura (1986) addresses the role of self-efficacy in learning and was the primary theory guiding the research as it addressed the role of teacher efficacy in working with gifted students as an integral part of their shared experiences.

An understanding of both the self-efficacy theory (Bandura, 1997; Barbier et al., 2019; Merriman, 2012) and the Achievement-Motivation theory (Elbeheri et al., 2018; McClelland, 1988) provided a conceptual model describing how the gifted student learns and how the environment plays a role in how they respond to instruction. Bandura's social cognitive theory promotes the link between cognition and social interaction in the learning process (Bandura, 1986;1997). While the need to include differentiation models and strategies for teaching gifted

and talented students is important, the ability for students to interact and build relationships within the classroom are also fundamentally important. Participants reported the challenge of engaging students online and the ability to build relationships to tailor lessons based on the students' cognitive needs. The data from both the interviews and journal prompts showed interesting conflicts in the sense of efficacy among the participants based on student engagement and connections. Participants agree that the student must be active participants in teaching and learning process coupled with a cooperative relationship with the teacher to gain a deeper understanding of the content within the virtual platform. Again, the results indicated that teachers felt like they tried multiple methods and opportunities to remediated learning which is a part of the theoretical framework. However, there was not strong evidence of this as a practice in the study. Most teachers were still reliant on teacher-centered instructional practices during online learning.

According to McClelland's Achievement Motivation Theory student's behavior and performance based on the individual's need for achievement (Elbeheri et al., 2018; Freeman et al., 2008). Gifted and Talented students have a higher level of intrinsic motivation compared to their peers and strive for high academic achievement (Elbeheri et al., 2018). Participants reported that while the overall achievement decreased virtually, while a small population of students excelled through virtual learning. These students were gifted and intrinsically motivated. Teachers indicated that the difference is that these learners tended to be more autonomous or self-directed and took charge of their own learning. However, many participants reported a decrease in achievement and engagement due to students' struggles with the complexity of learning online. The data, in this case, did not present strong evidence that the participants were able to provide differentiated lessons and activities for gifted students.

The data analysis from the interviews revealed that the participants, as a whole, expressed mostly moderate levels of efficacy to differentiate lessons for all learners. However, the journal prompts revealed more insecurity, self-doubt, and a sense failure to challenge and extend the learning for high achieving students. However, the experience of teaching virtually made a way of changes to instruction and practices on the part of the teacher in the face-to-face environment. While the participants reported shifts in their approach to learning and teaching philosophy, they did not provide examples of differentiated lesson plans, tests, or student work.

In analyzing the application of Achievement-Motivation theory and socio-cognitive theory in the experiences of the participants with the phenomenon, it is clear that while there is a strong belief among the participants in the theoretical application of these concepts, the practice is still not the norm. There continues to be a need for staff development opportunities for educators working with gifted students to improve the inequities within the quality of education for high-achieving student students.

Empirical Discussion

This study supports the notion that there is a correlation between attitude and action (Matheis et al., 2015; Sytsma, 2021). Unintentionally, a teacher's personal attitudes and believes lead to the development of their instructional practices (Sytsma, 2021). Data regarding the attitudes and beliefs of the participants toward differentiating instruction for the gifted learner was extracted through the research process. What developed were the themes of positive attitudes and negative attitudes toward differentiation. These were influenced by many factors and, therefore, in this researcher's opinion, a function, of the personal beliefs of the individuals and the institutional requirements in which they operate. Positive attitudes toward differentiation for gifted students included differentiation is already an integrate part of current instructional

practice, positive personal experience with differentiation, respect for the resiliency of the of the online environment, multiple intelligence of students, and a belief that all children can learn. Therefore, the data from this study showed that teachers who have had personal experiences differentiating instruction demonstrated more positive attitudes toward leveling instruction for all students. Negative attitudes centered around a lack of training and professional development, time constraints, staffing constraints, and the idea that differentiation requires a great deal of work above and beyond what is normally required. Most participants demonstrated either positive or negative attitudes and beliefs toward differentiation; however, some participants were contradictory. The participants all shared their experiences teaching gifted students virtually which were, for the most part, positive. However, negative experiences were rooted in student engagement and the ability to reach all students. These experiences however, shaped their current teaching practices and positive attitudes towards differentiating instruction to extend the learning experience for gifted students in their classrooms.

What is interesting is that the attitudes and beliefs of the participants seemed, at times, to contradict the sense of efficacy that teachers expressed in their journal prompts and their enthusiasm displayed toward student-centered teaching practices. This would seem to indicate that the site, while moving in the right direction toward equitable opportunities for gifted students, still needs to allow for more teacher training and support.

Limitations

As with all research, certain limitations with this study exist. In this study, the primary limitations were found in the size of the sample studied, which was 10 participants. While the sample size meets the requirements for recommended phenomenological qualitative research, 10 participants is on the low end (Creswell, 2013). Eliciting participants for this study was difficult

due to the lack of communication between the site and its employees concerning gifted enrollment. Additionally, I was an employee of the district and in a position of knowledge of the district's policies for the education of gifted and talented students, which was another limiting factor. Originally, it was hoped that the study would encompass the two northernmost sites. However, this was not a viable option due to administration shifts within the district. However, time constraints related to the completion of the research required the securing of a different school within the school district. Furthermore, the study was limited in scope and focused on only one district and two school sites.

The location of the sites could be considered a limitation since the district in Southern Maryland is a transient area and the demographics for surrounding counties change drastically. The district is an easy commute to major cities in both Virginia and Maryland, with large populations of military and government families. All these areas are extremely diverse in their demographics and are not reflective of the district studied. Perhaps the biggest limitation in the study was my inability to procure documents in the form of lesson plans reflecting the differentiation and best practices for the instruction for the gifted learner.

Delimitations

To determine the essence of the phenomenon and ensure the participants had lived experiences, I made certain delimitations. First, since I sought to elicit the shared experiences of the participants, qualitative phenomenology was chosen as the methodology and transcendental phenomenology was the specific design. As my belief that there is a singular reality, qualitative research was the most effective approach and appropriate design for this study, as the focus was to inquire individual experiences in natural settings (Creswell, 2013).

The decision to employ a phenomenological design was an appropriate decision as I sought to obtain understanding of the phenomena and describe the essence of the participants' experiences (Moustakas, 1994). Additionally, I chose a transcendental phenomenology design because it allows for the suspension of personal bias through epoché or bracketing (Creswell, 2013). I had significant experience with the phenomenon of teaching gifted students at the middle school level and at the site location and, therefore, needed to set aside my own experiences to allow the experiences of the participants to be expressed.

Further delimitations were employed in the participant selection process to ensure that participants had experience with the phenomenon. Participants were required to be at least 18 years of age, hold a valid teaching license, and had to have a minimum of one-year of virtual teaching experience. In this way, the data would reveal a wealth of experiences and allow the essence of the shared experiences to emerge.

Recommendations for Future Research

In consideration of the study findings, limitations, and the delimitations placed on the study, several recommendations are made for future research. The study would benefit from a wider scope in the form of comparing districts in Maryland and encompass other middle schools. The size of the participant group could also be increased in this way. It may also be beneficial for the researcher to not be in any way affiliated with the districts and/or schools being studied to avoid the inherent risk of personal bias in the analysis of the data. A study of more diverse districts with high gifted populations would provide further insight into this phenomenon.

The study might also yield more in the way of evidence if it were analyzed more fully from document analysis of materials supplied by participants to determine the extent to which the concept of differentiation has moved beyond the theoretical agreement and actually become

practice to extend the learning for high achieving students. An in-depth study of those documents that reflect differentiated practices and student achievement may yield more in the way of practical knowledge.

While qualitative methods are the best for examining the experiences of teachers, quantitative methods may be effective in examining practices and determining the extent to which teachers are actively engaged in implementing differentiated instruction. Action research projects focused on the effectiveness of differentiated strategies and practices for gifted instruction may also be beneficial to the body of knowledge on this subject.

Conclusion

Rooted in McClelland's (1988) achievement-motivation theory and Bandura's (1986; 1997) social cognitive theory, this research sought to explore the lived experiences of middle school teachers in differentiating lessons, assignments, and assessments for gifted and talented students through virtual learning. Through an analysis of the data provided by the semi-structured recorded interviews, individual journal prompts and document analysis, several findings were revealed. Participants initially revealed in the interviews a moderate sense of efficacy in differentiating instruction for the gifted learner, however, was revealed to be contradictory through triangulation of the data. The use of effective instructional strategies and the integration of advanced curricula through differentitaion, fosters gifted and talented students' ability to develop content depth and complexity (Callahan et al., 2015). The results of this study suggest teachers have a high efficacy for differentiation instruction also have positive attitudes and beliefs for leveling instruction for all learners. Student-centered instructional strategies, provide an effective means for differentiating through virtual platforms. Through student-centered learning, students become self-sufficient, creative thinkers and people who appreciate

and value the subject being taught (Yancy, 2012). By keeping students at the center of the lessons, a teacher can engage and motivate students to deepen their conceptual knowledge of the content (Yancy, 2012). Therefore, when the curriculum and instruction are differentiated to meet the needs of gifted students, student engagement increases during virtual learning (Riley et al., 2017).

Overall, the data revealed that teachers were eager to support and relate to students through synchronous learning. However, there also emerged themes of stress and insecurity in relation to the teacher's ability to effectively differentiate instruction through virtual platforms with the purpose of extending the learning for gifted and talented students. Most participants reflected a desire to learn strategies and techniques to challenge the gifted learner.

In relation to the theoretical framework of the study most participants were advocates of using interactive strategies in their instructional methods to increase student engagement online. They felt that strategies like problem-based learning were beneficial to all students but did not necessarily extend the learning for the gifted learner. A few participants were not as comfortable with the use of differentiation as they felt they were not properly trained, provided strategies or supported to implement leveled lessons. There was a strong emphasis on the relationship between engagement, achievement, and retention of information of students through virtual learning. What the data did show that participants who implemented differentiated learning strategies within virtual platforms did have students that fully participated in the learning environment and excelled through online learning.

Teacher attitudes and beliefs regarding the instruction for high achieving students was positive and overall teachers believed that there was a need to differentiate instruction for all learners. Negative attitudes emerged in relation to the challenges that teaching students online

decreased student engagement and motivation to learn. These negative attitudes were not explicit and were aimed at the amount of time, training, and support that was available for the increased amount of work needed to plan and implement appropriately differentiated lessons.

Effective strategies for the instruction of gifted students were present in the data, particularly those with a foundation in achievement-motivation and socio-cognitive learning theories (Callahan et al., 2015). Participants were mostly in favor of providing social contexts for learning, scaffolding of instruction, and experiential learning experiences, yet did not relate how those were adapted for the gifted learner.

In conducting this research, I realized the extent to which classroom teachers empathize with their students and desire to effectively reach all students. The passion expressed by the participants allowed me to understand that, for the participants in this study, the experience of working with students through virtual learning was both rewarding and frustrating. Participants in this study want to teach, and, for most participants, a lack of understanding of how to challenge the gifted learner which seemed to create a barrier to their ability to effectively extend the learning for these students. Institutional limitations beyond their control were also frustrating factors in their sense of efficacy. The knowledge that I have gained from conducting this research will be shared with the Coordinator of Advanced Learning and Instruction in the hopes that further training and professional development for teachers around strategies and practices for the instruction of gifted and talented students can be implemented. Additionally, insight for understanding of the need to provide adequate time to collaborate with specialists and plan for the needs of high ability students can be provided to teachers.

I have enjoyed this study immensely, and it has reinforced my perspective on the experiences of the middle school teacher working with gifted and talented students through

virtual learning. These teachers are truly dedicated and committed to reaching each student they educate. They are, however, insecure and frustrated by their own limitations and the limitations that are set by the district. It is my hope that this research will provide support to the body of knowledge to encourage policymakers and administration to understand the level of further support that teachers require to support and excel the gifted student in the public school system. It is my hope that districts will begin to move away from the traditional teacher-centered approach to learning and instruction, and towards a more student-centered approach of learning where students must be actively involved in the construction of knowledge (Liu et al., 2009). When students are allowed to take ownership of their learning, they become more engaged in their learning environment.

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Appendix A

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

November 16, 2022

Amanda Price
Grania Holman

Re: IRB Exemption - IRB-FY22-23-90 CHALLENGING THE GIFTED LEARNER VIRTUALLY: A PHENOMENOLOGICAL STUDY

Dear Amanda Price, Grania Holman,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix B

District and Site Approval

September 13, 2022

Dear Ms. Price,

This is a formal letter indicating that your request for research has been approved with the following stipulations:

- All information, requests, and coordination of the project should be directed to me, Director of Information Technology.
- Any changes to your research design must be communicated to me for review and consideration of approval.
- No information that is collected from you or other staff should be identifiable in nature.
- Results of the study must be kept confidential.
- When requesting participation from staff members, it must be clear that the study is voluntary.
- A summary of your results will be sent to me and Coordinator of Advanced Learning, upon completion of your research.

If you have any questions, please feel free to contact me.

Sincerely,

Permission Response

January 11, 2023

Dear Mrs. Price:

After careful review of your research proposal entitled Challenging the gifted learner virtually: A phenomenological study, I have decided to grant you permission to contact our faculty and invite them to participate in your study.
Check the following boxes, as applicable:

☐ I will provide our membership list to Amanda Price, and Amanda Price may use the list to contact potential participants to invite them to participate in her research study.

☑ I grant permission for Amanda Price to contact potential participants to invite them to participate in her research study.

☐ I will not provide potential participant information to Amanda Price, but we agree to provide her study information to potential participants on her behalf.

Sincerely,

Permission Response

January 11, 2023

Dear Mrs. Price:

After careful review of your research proposal entitled Challenging the gifted learner virtually: A phenomenological study, I have decided to grant you permission to contact our faculty and invite them to participate in your study.
Check the following boxes, as applicable:

☐ I will provide our membership list to Amanda Price, and Amanda Price may use the list to contact potential participants to invite them to participate in her research study.

☑ I grant permission for Amanda Price to contact potential participants to invite them to participate in her research study.

☐ I will not provide potential participant information to Amanda Price, but we agree to provide her study information to potential participants on her behalf.

Sincerely,

Appendix C

Permission Request Letter

Liberty University

School of Education

Qualitative Study Permission Request

November 20, 2022

Dear Principal,

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is Challenging the gifted learner virtually: A phenomenological study. The purpose of my research is to explicate the lived experiences of core academic middle school teachers with differentiating instruction and challenging the gifted learner in rural southern Maryland.

I am writing to request your permission to conduct my research at your school. Additionally, I would like to contact members of staff at your school to invite them to participate in my research study. The data will be used to describe themes related to the shared experiences among teachers that include both positive and negative experiences differentiating instruction and challenging the gifted learner virtually. The results of this study may inform the body of knowledge regarding the education of gifted learners and address acceleration practices to

improve challenging this population in the classroom and achieve academic success. Participants will be asked to complete an online screening to see if they qualify to participate in this study prior to being presented with informed consent information. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval. A permission letter document is attached for your convenience.

Sincerely,

Amanda J. Price

Doctor of Philosophy in Education Candidate

Appendix D

Informed Consent

CONSENT TO PARTICIPATE IN RESEARCH

CHALLENGING THE GIFTED LEARNER VIRTUALLY: *A Phenomenological Study*
What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?

Principal Investigator: Amanda J. Price, Doctor of Philosophy in Education Candidate, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must have at least one year of experience teaching gifted students in virtual classrooms on the middle school level. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to explicate teachers' lived experiences challenging gifted and talented middle school students while providing instruction virtually in rural southern Maryland schools. This study will include both positive and negative experiences differentiating instruction and challenging the gifted learner through virtual instruction. The results of this study may inform the body of knowledge regarding the education of gifted learners and address acceleration practices to improve challenging this population in the classroom and achieving academic success.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Participate in a semi-structured interview: The interviews will last between 30 to 60 minutes and will take place via Teams at the participants' convenience. Interviews will be recorded for transcription and analysis purposes only.
2. Participate in journal prompts: **Electronic** journal prompts will be used as a complement to the interview process. Participants will receive an email with questions to answer on their own time and return to the researcher for analysis. Journal prompts will take between 15 and 45 minutes of the participant's time.
3. Provide documents including but not limited to lesson plans, professional development notes, and professional collaborative planning notes. These documents can provide insight into how teachers were reaching and teaching students through online education. The time to locate these documents may vary per participant. Collecting and sending documents to the researcher should not take more than 30 minutes of the participant's time.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study; however, participants may gain a more in-depth understanding of the phenomenon of perceived academic challenges among gifted and talented students through their participation. Your participation, however, will be of considerable benefit for educational purposes, and benefits to the educational field include adding to the body of knowledge of how to challenge gifted and talented students in the classroom.

What risks might you experience from being in this study?

This study is not intended to provoke any physical or emotional discomfort. The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. However, you may choose to share sensitive and confidential information during the interview. All efforts will be made to ensure confidentiality.

How will personal information be protected?

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by using a pseudonym instead of your name when transcribing the interview. The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared. Additionally:

- Interviews will be conducted via teams where others will not easily overhear the conversation and the names of participants will remain confidential
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision concerning participation will not affect your current or future relations with Liberty University or Public School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Amanda J. Price. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her. You may also contact the researcher's faculty sponsor, Dr. Grania Holman.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to video-record me as part of my participation in this study.

Printed Subject Name

Signature & Date

Appendix E

Recruitment Email

Dear Recipient:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to explicate the shared experiences of teaching gifted and talented students virtually, and I am writing to invite eligible participants to join my study.

Participants must have at least one year of experience teaching gifted students in virtual classrooms on the middle school level. Participants, if willing, will be asked to participate in an interview (30 to 60 minutes), submit responses to questions digitally (15 to 45 minutes) and submit any documents that would be significant to the study (no more than 30 minutes). Participation will be completely confidential, and while names and other identifying information may be requested as part of this study, personal, identifying information will be kept private.

To participate, please click here https://forms.office.com/r/aJLsTta43z and complete the survey. After the completion of the survey, I will reach out to eligible individuals to schedule an interview at their convenience. Please contact me for more information

Sincerely,

Amanda J. Price
Doctor of Philosophy in Education Candidate, Liberty University

Appendix F

Screening Survey

CHALLENGING THE GIFTED LEARNER VIRTUALLY

A Phenomenological Study: Do gifted students feel challenged and motivated when the curriculum and instruction is differentiated through virtual instruction?

Principal Investigator: Amanda J. Price, Doctor of Philosophy in Education Candidate, Liberty University

* Required

* Please provide your given first and last name.

* Please provide your email.

Do you have at least 1 year of experience teaching gifted students virtually? *

- ☐ Yes
- ☐ No

Did you teach virtually during the 2020 pandemic? *

- ☐ Yes
- ☐ No

Have you taught online advanced courses for gifted students? *

- ☐ Yes
- ☐ No

What current grade level do you teach? *

- ☐ 6th
- ☐ 7th
- ☐ 8th
- ☐ None of the Above

5. What subject(s) did you teach virtually? *

- [ ] English
- [ ] Math
- [ ] Science
- [ ] Social studies
- [ ] Foreign Languages
- [ ] Other

6. During virtual learning, for which school were you teaching? *

- ◯ Site 1 Middle School
- ◯ Site 2 Middle School
- ◯ Virtual Academy
- ◯ Other

7. How long have you been a certified teacher? *

- ◯ 1 to 3 years
- ◯ 3 to 10 years
- ◯ 10 to 20 years
- ◯ 20 plus years
- ◯ I am not certified/I do not have a teaching certificate

Appendix G

Figures and Tables

Table 1: Site Demographics

Site Data						
Site Name	Student Poputlation	Employment	Student teacher ratio	Number of Identified Gifted Students (2021)	Number of Identified Gifted Students (2022)	Percent of the Student Population
Site 1	672	37	18.2	107	149	16.00%
Site 2	622	38	16.4	84	136	13.50%

Demographics/Site								
Site Name	American Indian/Alaska Native	Asian	Black	Hispanic	Native Hawaiian/Pacific Islander	White	Two or MoreRaces	Free/reduced Lunch
Site 1	1	15	62	26	2	510	56	72
Site 2	0	14	48	38	–	457	64	72

Table 2: Participant Demographics

Age	Gender	Race/Ethnicity	Education	Years of Experience	Years Working with Gifted Student	Currently Working with Gifted Students
36-45	Female	White	Bachelors, Master	10 to 15	3	Yes
46-55	Female	White	Bachelors, Master	20 to 25	22	Yes
46-55	Female	White	Bachelors, Masters	20 to 25	21	Yes
46-55	Male	White	Bachelors, Masters	15 to 20	16	Yes
46-55	Male	White	Bachelors, Masters, Educational Specialist	20 to 25	21	No
46-55	Female	White	Bachelors, Masters	30 to 35	32	Yes
46-55	Female	White	Bachelors, Masters	20 to 25	20	Yes
36-45	Female	White	Bachelors, Masters	10 to 15	15	Yes
46-55	Female	White	Bachelors, Masters	15 to 20	20	Yes
36-45	Male	White	Bachelors, Masters	15 to 20	18	Yes

Table 3: Open-Ended Interview Questions

1. Please introduce yourself to me, as if we just met one another.

2. Please tell me about your classroom role and experience.

3. Please describe the cognitive levels in your classroom.

4. How would you describe your experiences teaching synchronous lessons online?

5. Explain your lesson planning process for the online experience?

6. Describe your experiences, during on-line instruction, and how would you ensure all your students were reached in a lesson?

7. How would you compare student achievement during this experience to that of a face-to-face environment?

8. Describe a time through virtual instruction in which a student is not reaching their full potential and your reactions to this scenario?

9. How would you describe a low-performing gifted student in your classroom?

10. Describe how you would challenge learners, especially gifted students, in the virtual environment.

11. Explain how you make the virtual classroom experience more/less challenging for the gifted learner?

12. We have covered a lot of ground in our conversation, and I so appreciate the time you've given to this. I have one final question. What else do you think would be important for me to know about your experiences?

Table 4: Open-Ended Journal Prompt Questions

1. Describe the methods of instruction you received as a student growing up.

2. Describe your philosophy of teaching. In what ways have those experiences impacted your instructional practices?

3. Describe your primary method for instruction in your content classroom. (Examples if needed: guided learning, lecture note-taking, independent research, collaboration, learning centers).

4. Describe the instructional practices you use in working with your gifted students.

5. Describe any informative experiences you have had working with gifted and talented students.

6. Describe your level of confidence in planning instruction and assessment for gifted and talented students.

7. Describe your attitudes or beliefs about differentiating instruction for gifted and talented students.

8. Describe your overall experiences providing opportunities for students to work in groups or with partners.
9. Going forward, what further training for working with gifted and talented students you would like to receive?

10. Describe anything else about your experiences working with gifted and talented that you haven't already shared, and you would like to.

Table 5: Participants Teaching Experience

Teacher Participant	Years Taught	Highest Degree Earned	Content Area	Grade Level
Katherine	10	Masters	English	6th
Whitney	22	Masters	Special Education-All Content Areas	8th
Kelly	23	Masters	Science	8th
John	16	Masters	Physical Education	6th - 8th
Kevin	21	Educational Specialist	Social Studies	8th
Lydia	23	Masters	Social Studies	7th-8th
Kerri	20	Masters	Foreign Language	7th - 8th
Clara	15	Masters	Science	8th
Lorelai	15	Masters	Math	6th
Alex	18	Masters	Science	8th

Table 6: Theme Development

Document name	Approach to Teaching	Giftedness in the Classroom	Challenge of Engagement	Attitudes towards Differentiation	Challenge of Teaching Virtually	Online Teaching Experience	Number of codes
Alex interview	1	1	1	1	1	1	6
Lorelai Individual Interview	0	1	0	1	1	1	4
Lydia Interview	0	0	1	1	1	1	4
Kerri Interview	0	1	1	0	1	1	4
Tony Interview	0	1	1	1	1	1	5
Katherine Interview	0	1	1	1	1	1	5
Whitney Interview	0	1	1	1	1	1	5
Kevin Interview	0	1	1	1	1	1	5
Kelly Interview	0	1	1	1	1	1	5
Clara Interview	0	0	1	1	0	1	3

Table 7: *Research Questions and Themes*

Research Questions	Corresponding Themes	Participant Quotes	
RQ1 : What are the shared lived experiences among select middle school, core academic, teachers when differentiating instruction and challenging gifted learners in southern Maryland during virtual instruction?	• Differentiated Instruction • Planning • Professional Development	"Gifted students really seem to thrive when given a chance to write things out instead of just answering questions. They explain and go into detail a lot which really expands their learning. Giving them a challenging problem engages them to explore and problem solve." - Clara Interview	"I haven't received any specific training in working with those students. I was never really encouraged or trained on how to approach the differentiation of virtual learning; I think modifying things like I always do in the classroom prepared me to some degree. In general, I don't feel like I've gotten much training at all focusing for the gifted, modifying things for the gifted learner. That's something that I feel like I've had to explore on my own." -Alex Interview
SQ1: How do the participants describe their sense of self-efficacy to differentiate instruction to meet the cognitive demands of the gifted and talented learner virtually?	• Established technology • Support of a co-teacher • Student engagement and relationship building • Need for professional development • Project-based learning • Differentiated instruction	"Teaching starts with building relationships and designing instruction to be as engaging as possible." - Keven Interview	"There is a vantage of working with another teacher and planning. So, we would meet after hours and look at the curriculum, and we would look at our student body and we would say what would this student need to access the curriculum? Do we need to build scaffolds? It's a huge advantage having another teacher" -Whitney Interview
SQ2: How do participants describe their attitudes and beliefs about differentiating instruction and challenging gifted learners?	Positive themes • differentiation is already a part of teaching practices • positive student experience • the resiliency of the challenge for students, and its importance in the classroom.	"Differentiation is important for all levels so that each student feels that they are working appropriately to their level of learning." -Kerri Interview	"Our problem in education is that we either only differentiate instruction for the low achieving kids or we think differentiating instruction for the high achieving kids is extra work." -Katherine Interview
	Negative themes • great deal of work and time above and beyond what is normally required • Staffing constraints • Lack of training.	"When working with gifted and talented students I feel that I do them a great disservice due to my lack of training in how to teach students of high academic caliber. Much like special education, proper certification and experience is needed to hone this craft and I feel the same way about gifted and talented." -Kelly Interview	"Much like we should differentiate the work we do with struggling students, gifted students should be approached differently. Although I've had many gifted students in my time, I don't feel like I've ever purposely modified instruction in a meaningful way to best support them. I'd love to be more comfortable doing that." - Alex Interview

Figure 1: Code Configurations

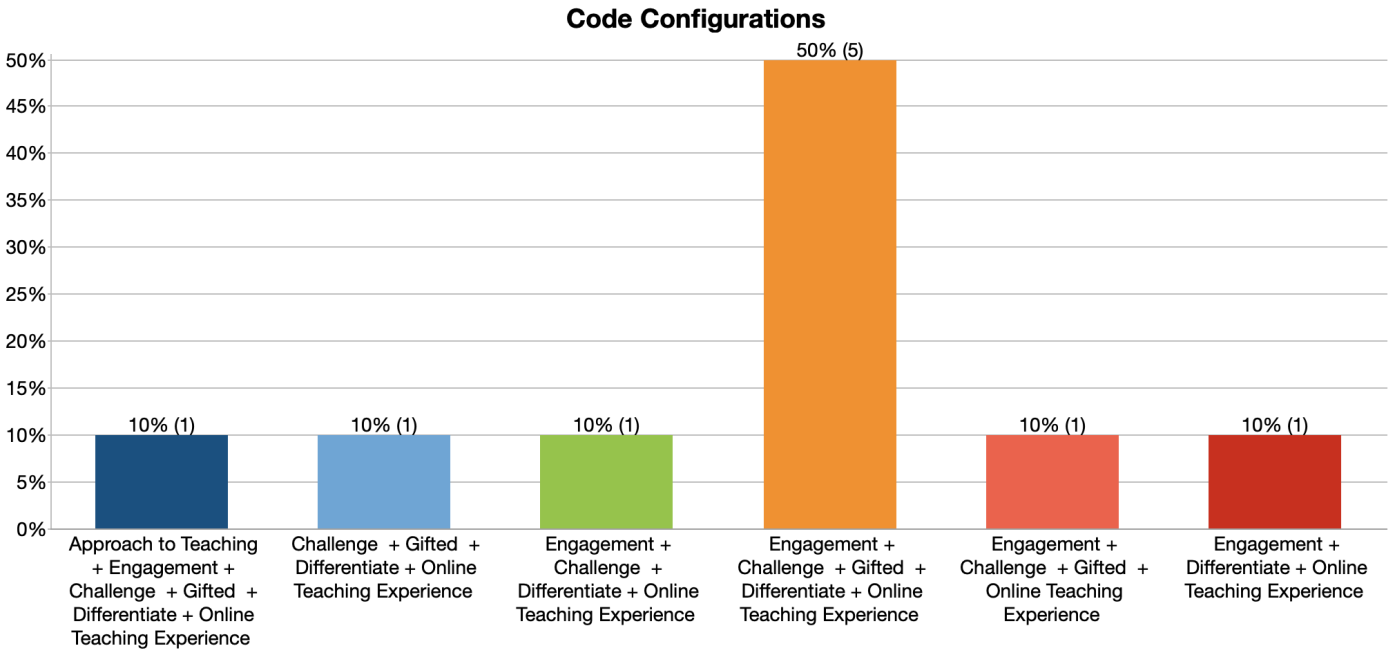

Figure 2: Code Percentages

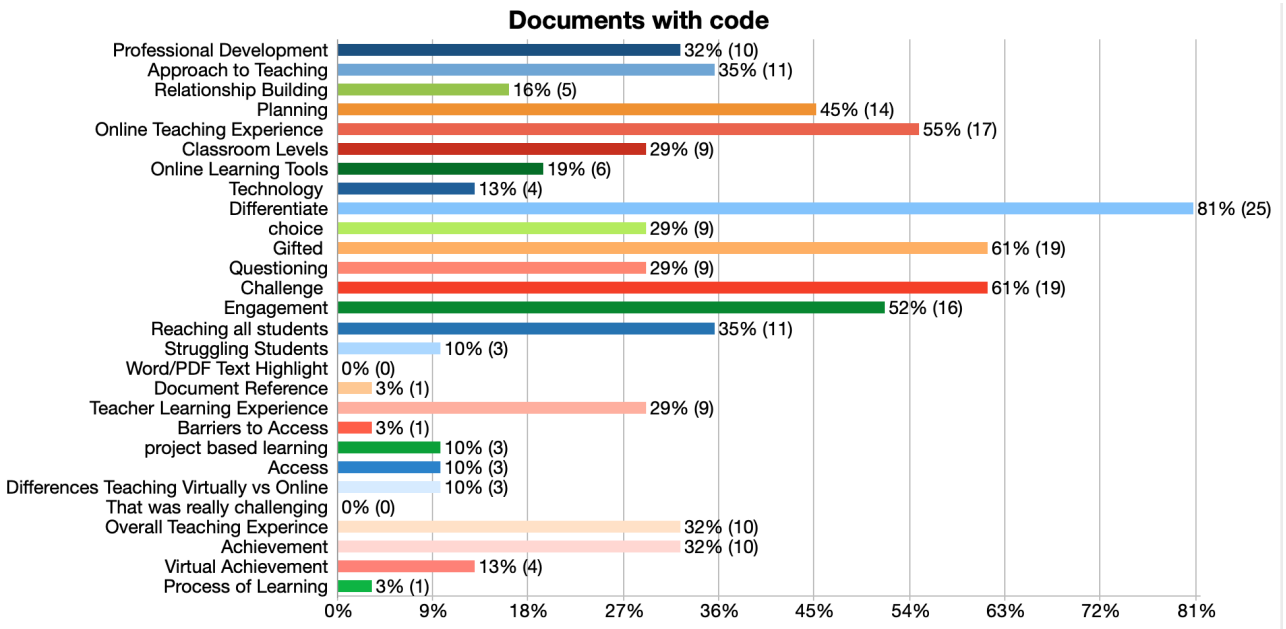

Figure 3: Code Intersections

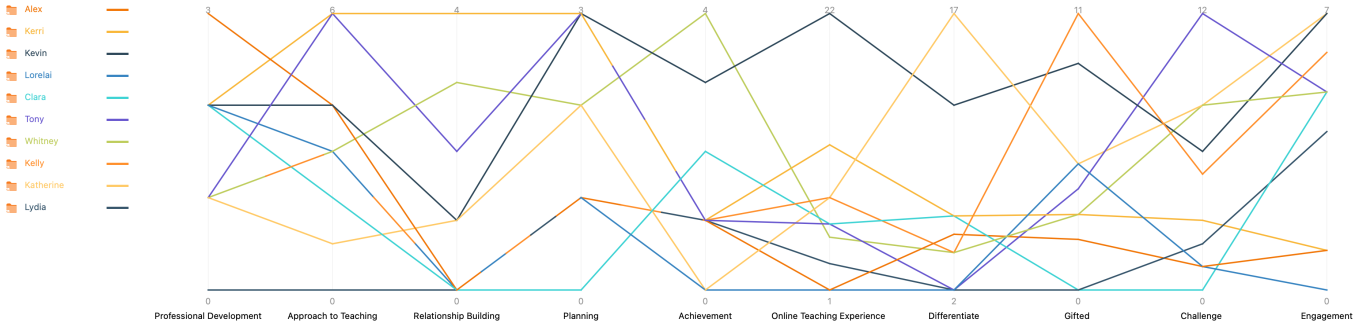

Figure 4: Code Co-occurrence Model

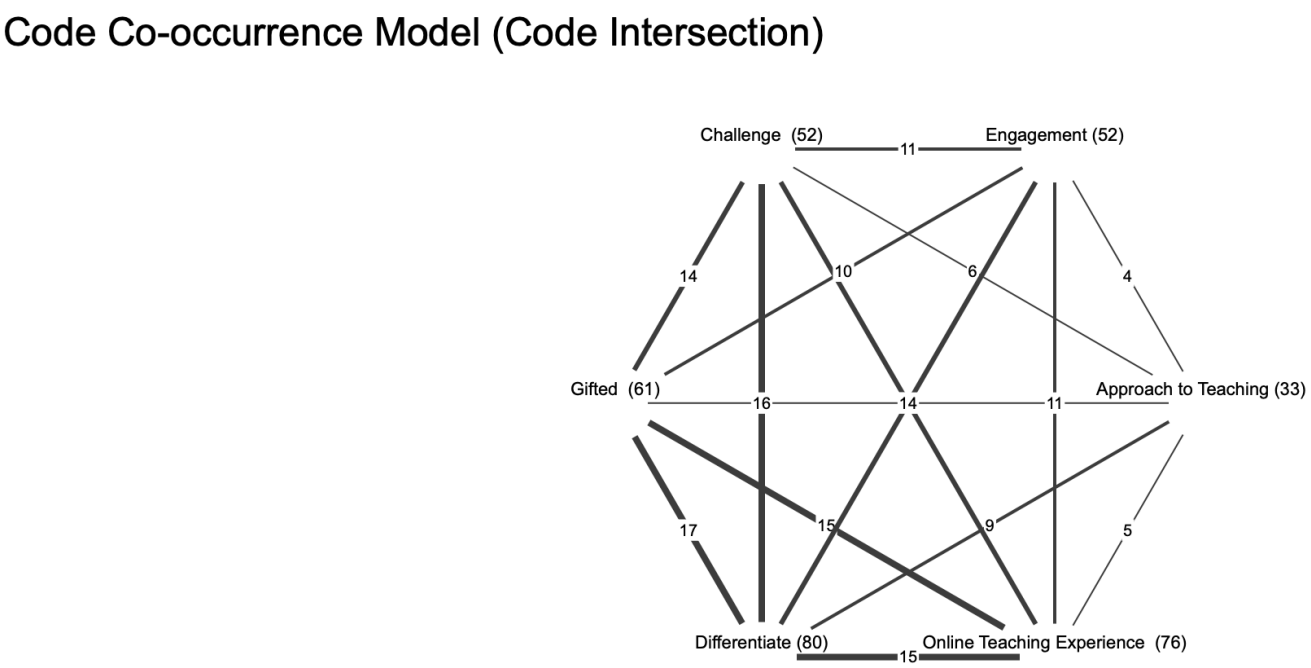

Figure 5: Key Word Frequencies