A TRANSCENDENTAL PHENEMONOLOGY OF GENERAL EDUCATION TEACHERS'

EXPERIENCES INSTRUCTING TWICE-EXCEPTIONAL HIGH SCHOOL STUDENTS

by

Jill Denise Collet

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

This transcendental phenomenological study examined the experiences of 10 teachers of twice exceptional students at two high schools in northeast Ohio. The central research question was: What are the shared experiences of general education high school teachers instructing twice-exceptional students in northeast Ohio? Sub-questions explored how participants described their experiences in meeting the educational needs of twice-exceptional learners, how teachers described their self-efficacy in regard to teaching twice-exceptional students, and obstacles they found while teaching these students.   Moustakas' (1994) transcendental model to find the essence of the phenomenon was utilized to collect data through interviewing participants, conducting online focus groups, and collecting responses to essay prompts after which systematic data analysis was employed through coding, peer review, triangulation, and description. Theories that guided this study were the post-modernist constructivist idea of critical pragmatism as espoused by Skrtic (1991) which asks teachers of students with learning disabilities to continually re-examine and evaluate their pedagogy and construction of curriculum in collaboration with their colleagues and Dweck's (1999) theory of growth mindset focusing teachers on growth of intelligence. Three themes emerged during the study: collegial support, student-teacher relationships and ongoing professional development. Results indicated that although teachers' knowledge base of specific twice-exceptional instructional strategies was minimal, they relied upon their relationships with their students and colleagues and own feelings of efficacy to improve upon twice-exceptional pedagogy.

Keywords: gifted, learning disabled, twice exceptional, twice exceptional pedagogy

Dedication

First, I dedicate this work to my husband, Ed. Without your constant love, support and encouragement, this task would have been even more difficult. You push me to follow my dreams and are always there when I need you. I love you. I dedicate this to my Mom, who has always encouraged me in pursuing my educational dreams. She raised me to believe that I could do and be whatever I wanted and her support of my education in every way made that possible. Her love and encouragement has made me the person I am today. I dedicate this work to my sister, Jennifer. She is one of my biggest cheerleaders and dedicated to her family in every way. Finally, I dedicate this work to my Dad. He passed away just a few months before I began my dissertation journey. My immersion in this research helped me to focus during a very difficult time and I felt his pride and love for me every step of the way during the last five years.

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List of Abbreviations

Adequate Yearly Progress (AYP)

American Educational Research Association (AERA)

Attention Deficit Disorder (ADD)

Attention Deficit Hyperactivity Disorder (ADHD)

Autism Spectrum Disorder (ASD)

Automated Working Memory Assessment (AWMA)

Education for All Handicapped Children Act (EHA)

Emotional Behavioral Disorder (EBD)

Every Student Succeeds Act (ESSA)

Gifted Students with Learning Difficulties (GSLD)

Gifted with a Learning Disability (GLD)

Individuals with Disabilities Education Act (IDEA)

Individualized Education Plan (IEP)

Institutional Review Board (IRB)

Intelligence Quotient (IQ)

Learning Disabled (LD)

Least Restrictive Environment (LRE)

National Association for Gifted Children (NAGC)

National Twice-Exceptional Community of Practice (2eCoP)

No Child Left Behind (NCLB)

Office of Special Education Programs (OSEP)

Professional Learning Community (PLC)

Regular Education Initiative (REI)

Rehabilitation Services Administration (RSA)

Students with Disabilities (SWD)

Teacher-Based Team (TBT)

Twice-Exceptional (2E)

Vocational Education Act (VEA)

Vocational Rehabilitation (VR)

Written Education Plan (WEP)

CHAPTER ONE: INTRODUCTION

Overview

This chapter provides an introduction of a phenomenological study on general education teachers' experiences with twice-exceptional high school students in northeast Ohio. Twice-exceptional students are children who are academically gifted, yet possess a specific learning disability that necessitates the use of an Individualized Education Plan (IEP) while educating the child. Individual interviews, online focus groups, and written responses to prompts about teachers' experiences with twice-exceptional students will be the methods of data collection. This chapter includes the background of the study, an explanation of the situation to self, problem and purpose statements, study significance, research questions, the research plan, and the limitations of the study.

Background

With the growing recognition of special needs of today's learners, educational services have expanded exponentially in the last several decades as schools work to educate all students equitably. In looking at the school year 2014-2015, 6.6 million students from the ages of three to 21 received some type of service from special education departments (National Center for Education Statistics, 2017). The background of this study will be described in this section through the development of the historical, social, and theoretical contexts of twice-exceptional education.

Historical Context

Twice exceptional students have been increasingly identified as a targeted learning group over the last 30 years (Barnard-Brak, Johnsen, Hannig, & Wei, 2015; McCallum, 2013; Reis, Baum, & Burke, 2014; Siegle, et al., 2016). Students have long been identified as either gifted

or learning disabled, but as researchers explored the entire spectrum of exceptionalities including autism, Asperger Syndrome, specific learning disabilities, Attention Deficit Disorder (ADD), and hyperactivity disorders, scholars noted that many students with these exceptionalities performed at high levels when tested for giftedness (Barnard-Brak, Johnsen, Hannig, & Wei, 2015; Ottone-Cross et al., 2016; Reis, Baum, & Burke, 2014).

Educational reform took off during the Progressive Era from 1890 to 1930 with the founding of the American Educational Research Association (AERA) when public school administrators and university level researchers began to connect over some of the arising issues in education (Beadle, 2016). With the influx of immigrants, the continued development of industrialization and its associated jobs, and the rising advocacy of a model of universal education for all children, concerns were voiced regarding proper instructional strategies and advocacy for unique learner traits. The post-World War Two era and the presidencies of Eisenhower, Kennedy, and Johnson brought the building of infrastructure in competition with other countries during the Cold War that subsequently led the impetus to push vocational education upon schools in the United States (Epperson, 2012). These vocational educational programs were provided funding through the Vocational Education Act of 1963 (VEA) and tended to target low-income areas and portions of the student population that were marginalized and tended to not perform academically in core classes. The Individuals with Disabilities Education Act (IDEA), reauthorized in 2004, had its first go around in 1975 as the Education for All Handicapped Children Act (EHA) (Zumeta, Zirkel, & Danielson, 2014). Through the evolution of these laws, the identification of children with disabilities was widely expanded and a growing need was identified to provide services due to federal mandates.

As the recognition, identification, and federal involvement grew regarding children with learning disabilities, so did the push for gifted services. Early in the 20th century, researchers such as Lewis Terman helped to develop tests to identify giftedness such as the Stanford-Binet (Davis, Rimm, & Siegle, 2011). The Progressive Era brought researchers such as Eta Hollingworth who advocated for a specific curriculum for students that could target and improve upon the traits of giftedness. In the fifties and sixties, just as the Cold War pushed many marginalized students into the vocational fields to compete industrially with other communities, so was there a push to provide students upper-level education in math and the sciences so that developments could be made through competition during the Space Race.

With this identification and the subsequent studies carried out in search of effective learning and teaching strategies, a substantial amount of research emerged on best practices (Baldwin, Omdal, & Pereles, 2015; Bianco & Leech, 2010; Jeweler, Barnes-Robinson, Roffman, Shevitz, & Weinfeld, 2008; Kiloran, et al., 2013). Knowledge of the varied learning disabilities, strong leadership in pedagogical methods, learning local, state, and national guidelines for the treatment of gifted and learning-disabled students, and utilization of writing, organizational, and reading techniques are all recommended by various studies for encouraging twice exceptional students to learn in the 21st century (Baldwin, Omdal, & Pereles, 2015; Jeweler et al., 2008; Kiloran, et al., 2013).

Social Context

Despite the identification of effective methodologies, twice exceptional students' perceptions of their own learning and experiences in the classroom point to lack of teachers' use of these teaching and learning techniques (Berma, Schultz, & Weber, 2012; Ng, Hill, & Rawlinson, 2016; Willard-Holt; Weber, Morrison, & Horgan, 2013). Although many obstacles

exist for twice exceptional students such as lack of identification in underserved populations, lack of teachers and funding, and the masking of giftedness by learning disabilities, the lack of teacher knowledge and utilization of effective teaching techniques is one of the most prevalent (Barnard-Brak, Johnsen, Hannig, & Wei, 2015; Ottone-Cross, et al., 2016; Siegle et al., 2016). Research states that students with more advanced social and self-perception experience more success in school and teachers need to know how to promote this in their classrooms (Barber & Mueller, 2011).

In recent years, significant social equity research has been conducted that has exposed many of the inequities in the realm of education (Atwater, 2011; Banks, 2016; Santamaria, 2014). In the context of a democratic society, it is imperative that equitable opportunities be provided to students educationally despite their differences culturally, ethnically, economically, socially, or cognitively. Leadership opportunities and training to school administrators and teachers needs to be provided so that an awareness of how to best lead others through the challenges of the current inequities in education are communicated and enacted effectively.

Theoretical Context

Although a significant amount of research has been completed on teachers' experiences with gifted students and students with learning disabilities separately, fewer studies have been completed on twice-exceptionalism and no known studies have examined high school general education teachers' experiences with this group of students (Schultz, 2012; Siegle et al., 2016). The focus of this study is to explore general education high school teachers' experiences with twice-exceptional students because more research is needed from the perspective of teachers (Besnoy, et al., 2015; Foley-Nicpon, Assouline, & Fosenburg, 2015; Mayes & Moore, 2016). Skrtic's (1991) theories on continually evaluating special education curriculum and whether it

was democratically appropriate and Bandura's (2012) theory on self-efficacy promoted this examination of teachers' experiences with twice-exceptional students for not only improving practice, but levels of academic rigor, performance, and professional and social success. Yeager and Dweck's (2012) theories on learned helplessness and their advocacy for the teaching of resiliency among staff and students promoted the idea that no person must remain where society or circumstances pigeonholes them. This is true for both teacher and student. These theories combine as advocates for teachers having an ultimate accountability for their students' learning.

Situation to Self

As a classroom teacher for 21 years, the researcher experienced the frustration of how to instruct students that are labeled twice-exceptional. The researcher has taught all levels of classes from remedial to Advanced Placement. Many twice-exceptional students do find their way into the honors level courses where they are challenged. Students in these upper classes were often high functioning, had formed academic coping mechanisms that counter-acted many of their deficits, and in several cases, had formed relationships with classmates that allowed them to succeed with the social aspects of courses. The researcher does not necessarily believe their successes were due to anything that she did as an instructor. In fact, she believes that it had to do more with the high-functioning academics and social knowledge held by the twice-exceptional students' peers in their upper level classrooms. Socioemotional competence incorporates many facets and research has shown that interactions with peers and the ability to self-regulate has a positive effect on academic performance (Rabiner, Godwin, & Dodge, 2016).

The need to push her students to excel, combined with her advocacy for a social justice model, have provided the impetus for the researcher to do this study. As a current curriculum coordinator, the researcher wishes to push to find out how this can be communicated and taught

to teachers and administrators in the school system. Under many of the social justice models, there is a push to provide equitable education in inclusive settings taught by the most highly qualified teachers (Atwater, 2011; Banks, 2016; Santamaria, 2014). Due to the educational history of dividing students according to ability, vocation, and college-readiness, this equity has not been established. Often, the most inexperienced teachers and least knowledgeable on specific learning disabilities are placed in these teaching positions. More needs to be done for the teachers, who in turn, can provide stronger and more comprehensive educations to their students.

As a believer in constructivism, the researcher believes it is important to give the teachers a voice and learn of their experiences firsthand (Creswell, 2013). Social constructivists "seek understanding of the world in which they live and work" (p. 24).   Fleury and Garrison (2014) believed that educators should go beyond the more prosaic idea of pedagogical constructivism, and instead embrace the encompassing idea of a more critical constructivism, through which "the knower must also be considered" (p. 20). Little is known about the topic of twice-exceptionalism. The researcher's experiences and viewpoint, however, may be different from participants include in the researcher's study. Political discourse, school experiences and cultural awareness are experienced differently according to the anthropological considerations of society (Fleury & Garrison, 2014). Providing a platform for teachers to construct their own knowledge about twice-exceptionalism may lead to a fuller understanding of its implications.

Problem Statement

The number of students being identified with learning disabilities is increasing and previous studies propose identification, learning, and teaching strategies that can be utilized to promote academic success (Nolte & Pamperien, 2017; Ottone-Cross et al., 2017; Schultz, 2012).

The extent, however, to which these strategies are known by teachers and ultimately implemented within the classroom is problematic (Ng, Hill, & Rawlinson, 2016; Reis, Baum, & Burke, 2014; Willard-Holt, Weber, Morrison, & Horgan, 2013). As numbers of students identified as twice-exceptional have increased from approximately 180,000 in 2003 to 360,000 in 2006, the problem is an important one to study as this group comprises a portion of the student population under federal mandate to show growth academically; these same students often feel undervalued and that their specific needs are ignored (McCallum, Bell, Coles, Miller, Hopkins, & Hilton-Prillhart, 2013; Reis, Baum, & Burke, 2014). The problem is that twice-exceptional students are under-identified, often drop out of school, underachieve, experience difficulties in social interactions, and express lower senses of self than their peers (Algozzine, Schmid, & Conners, 2017; Baldwin, Omdal, & Pereles, 2015; Barnard-Brak, Johnsen, Hannig, & Wei, 2015; Besnoy et al., 2015; Coleman & Roberts, 2015).

By focusing on teacher implementation of recognized strategies, improvements can be made in the academic learning of twice-exceptional students along with improving self-perceptions of these students (Baum, Schader, & Hebert, 2014; Killoran, et al., 2013). Although there are many teaching strategies supported by research, parents and students do not feel as though they are being implemented adequately and many young teachers do not believe they have learned proper instructional techniques in their teacher preparedness programs (Besnoy et al., 2015; Rowan & Townend, 2016). The identified gap in this proposed research is that while studies have been completed in elementary and middle schools and amongst Advanced Placement programs in high schools, there is currently no research giving a voice to the experiences of general education teachers of high school age twice-exceptional students (Schultz, 2012; Szymanski & Schaff, 2012).

Purpose Statement

The purpose of this transcendental phenomenological study is to describe the lived experiences of one northeast Ohio county's general education teachers of twice-exceptional students. Twice-exceptional students have been identified as academically gifted by their school district while at the same time have been diagnosed with a specific learning disability that requires them to have an IEP (Killoran et al., 2013). This definition encompasses a wide range of students including those who may be academically gifted in all core areas while testing positive somewhere on the autism spectrum to students who may have a reading impediment but test as being gifted within the realm of creativity.

The first theory guiding this study is the post-modernist constructivist idea of critical pragmatism (Skrtic, 1991). Based on reactions to earlier disability theories, it asks teachers of students with learning disabilities to continually re-examine and evaluate their own pedagogical and construction of curriculum practices alongside their colleagues for the purpose of improving instructional practices for students with disabilities. The second theory guiding this study is Dweck's (2012) theory of motivation and growth mindset. Because people usually display the need to evaluate practices and seek to improve them, the theory of motivation and growth mindset applies to this study as it seeks to describe the pedagogical and educational experiences of teachers of twice-exceptional students.

Significance of the Study

As educators continue to embrace the recognition of previously unidentified sub-groups in the classroom, a concerted effort needs to be made in recognizing the experiences and challenges teachers experience when instructing twice-exceptional students (Baldwin, Omdal, & Pereles, 2015). Although gifted, learning-disabled students and the teaching methods used with

them have been studied extensively, further research is needed when combining the two labels.

The most recent studies on twice-exceptionalism concentrate on case studies of individual

students, phenomenologies of student and parent experiences, or quantitative studies measuring

their achievement (Barber & Mueller, 2011; Besnoy et al., 2015; Killoran et al., 2013).

Stakeholders that may benefit from this study include the administrators that design curriculum

for twice-exceptional students, the teachers who may benefit on learning more about the social,

behavioral, and instructional ins and outs of twice-exceptional students, and finally and most

importantly, the students themselves. A phenomenological study has the potential value of

uncovering instructional strategies that do work for some teachers by giving them a voice.

Furthermore, the study has the possibility of elevating the awareness of the needs of students,

families, and school personnel. Twice-exceptional students deserve an equitable and challenging

education that prepares them for a future where they can excel cognitively and socially.

Empirical Ramifications

This research may help advance the study of issues related to the instruction of twice-

exceptional general education students and provide a voice to high school teachers where it is

currently lacking. While some studies exist that examine teachers' experiences with gifted or

learning-disabled students, few examine the teacher's experiences with the twice-exceptional

learner (Schultz, 2012; Siegle et al., 2016; Szymanski & Shaff, 2012).

Theoretical Ramifications

This study may help to advance the constructivist and disability theory of critical

pragmatism for adding to the collaborative and evaluative strategies used by the teachers of

twice-exceptional students (Skrtic, 1991). Skrtic believes that it is important for teachers to

collaborate and work with one another to establish strong, instructional practices. No known

studies examine these collaborative efforts on the part of general education teachers of twice-exceptional students (Musset et al., 2016; Ng, Hill, & Rawlinson, 2013; Rowan & Townend, 2016).

Practical Ramifications

This study may help teachers become better curriculum writers, collaborators, and teachers committed to improving the teaching and learning of twice-exception learners (Bandura, 2012). Teachers' self-efficacy may be an important factor in improving the teaching experiences with twice-exceptional students (Jeweler et al., 2008; Killoran et al., 2013). As noted in several studies, teaching the twice-exceptional student involves many stakeholders (Alloway, Elsworth, Miley, & Seckinger, 2016; Killoran et al., 2013; Lo, 2017; Missett, Azano, Callahan, & Landrum, 2016). This research can be significant in that it may shed light on the work teacher educators, administrators, parents and the students themselves do to understand better the phenomenon of twice-exceptional teaching.

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Research Questions

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The purpose of this transcendental phenomenological study is to give a voice to those teachers of high school age twice-exceptional students and provide an opportunity to explore their shared experiences. Foundational to this study is the ideology that although legislators and educators have implemented changes to address perceived inequities among students due to societal expectations, educationally and developmental concerns should be addressed in their stead (Skrtic, 1991). Social cognitive theory advocated for self-reflection of a study's subjects (Bandura, 1991). Teachers and students alike must be in possession of a growth mindset in order to react to and address the challenges of instructing twice-exceptional students (Dweck, 1999). These theories drive the research questions of this study.

Central Question: What are the shared experiences of general education high school teachers instructing twice-exceptional students in northeast Ohio?

While several studies exist on the experiences of twice-exceptional students along with parental advocacy experiences, few studies focus on teacher experiences and none are known to exist on general education teachers' experiences of instructing twice-exceptional students in the high school setting (Baldwin, Omdal, & Pereles, 2015; Baum, Schader, & Hebert, 2014; Geri, Myelomas, & Portesoca, 2015; Neumunster, Yssel, & Burney, 2013).

RQ1: How do general education high school teachers instructing twice-exceptional students describe their experiences in meeting the academic needs of twice-exceptional students in general education classrooms?

Much research has been conducted on the types of instruction needed for success with twice-exceptional students, but few studies have examined teachers' experiences with the tools suggested for teaching and no studies examine general education teachers' experiences in the high school setting (Killoran et al., 2013; Reis, Baum, & Burke, 2014; Siegle et al., 2016).

RQ2: How do general education high school teachers instructing twice-exceptional students address needs of twice-exceptional learners to ensure learning?

In the examination of instructional practices for twice-exceptional students, suggested practices have been detailed by several educational researchers (Mayes & Moore, 2016; Musset, Azania, Callahan, & Landrum, 2016; Wang & Neihart, 2015). Some research suggests, however, that teachers find few opportunities for professional development and collaboration and that this is needed for future successful instruction of twice-exceptional students (Rowan & Townend, 2016; Siegle et al., 2016).

RQ3: How do perceived experiences of general education high school teachers instructing twice-exceptional students affect their self-efficacy when instructing twice-exceptional students?

Bandura's (2012) theory of self-efficacy has been important to the experiences of teachers as they attempt to improve upon instructional practices. It is suggested that more research is needed on teachers' need to improve their teaching strategies as it pertains to the instruction of twice-exceptional students (Rowan & Townend, 2016; Szymanski & Shaff, 2012; Wang & Neihart, 2015). This sense of self-efficacy is connected to both Skrtic's (1995) theory of critical pragmatism where teachers are expected to continually improve upon their knowledge of instructional strategies involving special education students along with Dweck's (1999) theory of a growth mindset.

RQ4: What obstacles, is any, prevent effective instruction from taking place in inclusive education?

Inclusive education is a theory supported by many as a way of promoting equity in education (Nolte & Pamperien, 2017). Twice-exceptional students are often placed in these general education settings; however, they may be placed with teachers that feel ill-equipped to deal with their special needs. It is suggested that there is an extensive need to examine these setting more in-depth and determine ways education can be delivered more effectively to twice-exceptional students (Szymanski & Shaff, 2012).

Definitions

1. *Attention Deficit/Hyperactivity Disorder (ADHD)* – Behaviors by students such as impulsivity, hyperactivity, and the inability to pay attention that preclude the learning process (Alloway, Elsworth, Miley, & Seckinger, 2016).

2. *Autism Spectrum Disorders (ASD)* – Autism can manifest itself in many ways, including difficulty interacting with others, difficulty in expressing emotion and understanding others. ASD can differ in severity and symptoms (Alverson & Yamamoto, 2017).

3. *Gifted* – The designation is given to students who have scored significantly higher than the norm on a form of measurement that may include a traditional intelligence test, interview, or some other type of evaluation. The designation may be given academically or in the fine arts (Altintas & Ilgun, 2016; McCallum et al., 2013).

4. *Individualized Education Plan (IEP)* – This plan is a legal document that details the learning needs of a student, the services the school will provide, and how progress of the student in need will be measured (Baldwin, Omdal, & Pereles, 2015).

5. *Learning Disabled* – This term is used to describe students who have some impediment to learning. These impediments may be cognitive or behavioral (Killoran et al., 2013; Reis, Baum, & Burke, 2014).

6. *Least Restrictive Environment (LRE)* – Schools are expected by law to provide a learning environment for all students that meets their learning needs without impeding with them with unneeded supports or separating them from the general education environment (Baum, Schader & Hebert, 2014).

7. *No Child Left Behind (NCLB)* – Passed during the administration of President George W. Bush in 2002, NCLB focused attention on providing improved instruction and requiring accountability through testing on the part of schools (Bell, Taylor, McCallum, Coles, & Hays, 2015).

8. *Twice-exceptionalism* – The designation where students who have been designated as gifted and in possession of a learning disability (Baldwin, Omdal, & Pereles, 2015).

9. *Working Memory* – This term refers to the ability of humans to place verbal, spatial, and listening pieces into the brain so that they may be utilized for tasks (Alloway, Elsworth, Miley, & Seckinger, 2016).

Summary

Chapter One has provided an overview of the proposed study and the research that suggests a need for a phenomenological study of general education high school teachers of twice-exceptional students. The problem is an important one to study as this group comprises an important subgroup under federal mandate to show growth. The literature and explanation provided suggests that there is a need to explore the experiences of these teachers and their contributions to the pedagogy and curriculum construction geared towards twice-exceptional students.

CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this chapter is to not only review, but synthesize the literature pertaining to the experiences surrounding twice-exceptional education. Although twice-exceptional learners have come to the forefront of many educators' minds, not enough is known about the education of this group to allow for definitive development of pedagogy and instructional strategies for them (Reis, Baum, & Burke, 2014). Even less is known about teachers' experiences with twice-exceptional students. Although some studies have been completed that examine teachers' attitudes towards gifted students with learning disabilities, no known studies examine twice-exceptional teaching in the general education, secondary classroom (Foley-Nicpon, Assouline, & Fosenburg, 2015; Gari, Mylonas, & Portesoca, 2015). This chapter begins with the theoretical framework utilizing Skrtic's (1991) theory of critical pragmatism and Dweck's (1999) theory of motivation and growth mindset. An explanation of the characteristics and history of twice-exceptionality begins the review. Because relatively few studies have been completed on the examination of teachers' experiences with children labeled specifically as twice-exceptional, a review of the literature found on students labeled as gifted and learning disabled will follow. The issues of identification methods, creation of curriculum and pedagogy, and the challenges often felt by students and their parents will be included.

Theoretical Framework

The axiological assumptions that the researcher brought to this study were a driving force behind the choice of theories utilized in this research (Creswell, 2013). Skrtic's (1991) pragmatic ideologies and criticisms of the United States' special education system as a series of legalities in juxtaposition to teachers' inclinations to consistently re-evaluate and make

educational decisions based on needs of individual students aligns with Dweck's (1999) theories on motivation and growth mindset. Teaching and learning is a continuum based upon observations of behaviors, personal characteristics, and a decision made to better one's self and students. Dweck's theories on motivation and growth mindset affects the teaching and learning environment by imparting upon teachers and students that attitude and belief in one's self can affect cognition and learning by all.

Skrtic's Theory of Critical Pragmatism

As a researcher in the world of special education, Skrtic (1991) theorized on the changes made in the world of special education from the 1960s forward. The move to mainstream students with learning disabilities into the general education classroom were a result of what he refers to as naive pragmatism. Naïve pragmatism is "a mode of analysis and problem resolution that is premised on an unreflective acceptance of the assumption that lie behind social practices" (p. 150). Skrtic (1991) believed that legislators and educators have become too enamored of implementing changes that only served to treat the educational system as a governmental institution used to perpetuate societal needs and beliefs rather than making developmentally and educationally appropriate decisions for individual students.

When the Education for All Handicapped Children Act (EHA) was passed in 1975, the intention was to implement a set of regulations that would protect students with special needs and educate them in environments where the fewest barriers to their future success could be put into place (Skrtic, 1991). According to Skrtic, however, the laws intended to mainstream students so that students with disabilities could experience normal peer-to-peer relationships and challenging educational opportunities prevented this from occurring. As the EHA began to show weaknesses, Skrtic discussed the replacement of it with the Regular Education Initiative (REI).

Although REI sought to improve the educational opportunities for special education students, there remained many of the same issues as with the EHA. Skrtic believed that neither of the movements could "explicitly recognize the connection between special education practices and assumptions" (p.150). Both laws, in fact, were victims of what he called "naïve pragmatism."

The theory of critical pragmatism is derived from both the history of attempted reforms in the world of special education and the need to allow teachers to make decisions based on the individual needs of their students (Skrtic, 1991). Skrtic believed that there were three interrelated practices and assumptions made by teachers of special education students. These practices included "special education as a professional practice, special education as an institutional practice of public education, and public education as an institutional practice of our society" (p. 150). Public schools were institutionalized in such a way as to build the future of society, and as such, must prepare all students to meet their highest abilities. Teachers, as professionals, needed to be able to go beyond implementing laws as legislators see fit to make, but assert themselves in such a way to make decisions that are in the best interests of individual students. Teachers, therefore, must act as advocates for their students and the needed changes within national, state, and local school systems. Skrtic was a firm believer that public education in democracies should provide superior educations in conjunction with being equitable for all. He argued, however, that the current educational system, in its unceasing need to provide this type of education, had become overly bureaucratic. Hence, the theory of critical pragmatism allowed for equity and access for all that must be tailored by local entities and teachers. Skrtic saw that the current special education system, albeit revised from previous iterations, was still creating inequities in society. Skrtic (1995) stated,

Whereas the aid of modern social inquiry is to justify social practices and institutions by

showing that they are based on a true representation of the world, the goal of pragmatism

is to change social practices and institutions by reconciling them with useful and thus

desirable moral ideas. (Skrtic, 1995, p. 12)

The experience of this is fuel for the present study. Teachers need to feel empowered and able to

build a curriculum and series of learning opportunities that empowers students. As a result,

"Educational excellence in the post-industrial era is more than basic numeracy and literacy, it is a

capacity for working collaboratively with others and for taking responsibility for learning"

(Skrtic, 1991, p.181).

Although teachers should be empowered to make necessary changes and adaptations to

ensure that all students are provided opportunities to learn equally, schools are often the

byproduct of government-run bureaucracies in which special and general educational classrooms

and departments are divided (Sandstrom, Klang, & Lindqvist, 2017). In their focus group study

of 60 staff members in a Swedish school, Sandstrom, Klang and Linqvist (2017) applied Skrtic's

theory of critical pragmatism and corroborated that an impediment to "the development of

democratic and inclusive schools is professional bureaucracy" (p.6). When inclusion of students

with special needs is attempted, staff members are caught up in the political nature of knowing

the accommodations for such student without understanding how to successfully implement the

instructional strategies necessary for them to learn.

Dweck's Mindset and Motivation Theory

Dweck believed that a key to learning for both children and adults was to possess a

growth mindset (Dweck, 1999). This growth mindset was in opposition to what she referred to

as a fixed mindset in which humans believed that they were born with a certain amount of

intelligence and that this is the end of it. Also known as the entity theory of intelligence, the

fixed mindset supported that teachers and students "will readily pass up valuable learning opportunities if these opportunities might reveal inadequacies or entail errors-and they readily disengage from tasks that pose obstacles" (p. 3). Dweck believed that the growth mindset allowed for the idea that with work and support from others, any person possesses the ability to increase their intelligence. This theory is of great significance to this study as research shows that teachers of twice-exceptional students and the students themselves often feel lost and unable to better the difficulties experienced in the twice-exceptional community (Foley-Nicpon et al., 2015; Gari et al., 2015; Misset et al., 2016). With guidance and the possession of a growth mindset, teachers and students may very well excel despite the difficulties associated with twice-exceptionality.

Related Literature

Although the study of twice-exceptionality is relatively new in the realm of educational research, substantial research has been conducted in specific learning disabilities and gifted education. An introduction to twice-exceptionalism, its definition, identification methods, curriculum and pedagogy, along with a review of gifted and special education related topics will be provided in this section.

Introduction to Twice-Exceptionalism

Twice-exceptional students have long been part of the educational landscape. Few efforts, however, were made to make the most of students' giftedness due to lack of knowledge of effective methodologies in teaching and difficulty identifying students due to learning disabilities masking their true abilities. Although very difficult to quantify because of under identification of students that are both gifted and learning disabled, the National Education Association (2006) estimated that twice-exceptional students make up as much as six percent of

the school population in the United States. Twice-exceptionality exists among all ethnic and socio-economic groups. In fact, low income students and minority students are often under-represented and misidentified academically, creating deficits of students who belong in gifted programs (Barnard-Brak, Johnsen, Hannig, & Wei, 2015; Mayes & Moore, 2016; Salisbury, Rule, & Vander-Zanden, 2016). It is crucial that the educational system make the most of all students' talents, and therefore effective service delivery of instruction to twice-exceptional students is important to discuss, research, and practice in today's classrooms.

The National Twice-Exceptional Community of Practice (2eCoP) created not only a widely-accepted definition of twice-exceptionalism, but also created guidelines for twice-exceptional students that recommended "specialized methods of identification that consider the possible interaction of exceptionalities" and "enriched/advanced educational opportunities that develop the child's interests, gifts, and talents while also meeting the child's learning needs" (Lee & Ritchotte, 2018, p. 71).

Experts in twice-exceptionality generally believe that these students fit into one of three categories (National Education Association, 2006). The first category consists of students that have been identified as gifted, yet are not identified as learning disabled because their giftedness overshadows and masks the disability. The second category is made up of students that have been labeled as learning disabled, but have not been identified as gifted due to the problems associated with the disability. The third category is where a student has not been identified as either gifted or learning disabled because the two labels cancel out each other. Once a student has overcome this difficult hurdle of being labeled as both gifted and learning disabled, many are placed into gifted programs with services for the disability. Although consciousness of twice-exceptionality is growing, and legislation has been implemented in the gifted and special

education worlds separately, teachers and administrators often struggle to provide services to students that will amplify their strengths while providing services for the identified disability (Foley-Nicpon et al., 2015; Gari et al., 2015; Killoran et al., 2013; Mayes & Moore, 2016).

Twice Exceptionalism Defined

Between 2003 and 2006, the number of students identified as twice exceptional has risen from 180,000 students to almost 360,000 students in the United States (Reis et al., 2014). Despite being similarly labeled, twice exceptional students' learning and personality characteristics vary widely across the population. Twice exceptional students may be gifted in music, art, or academics, while at the same time receive a diagnosis of Autism, Asperger Syndrome, Attention Deficit Disorder, hyperactivity, a specified learning disorder, processing problems, limitations based upon brain-based disease or damage, social awareness issues, behavioral limitations, or even emotional and personality disorders (Baldwin, Omdal, & Pereles, 2015; Barnard- Brak et al., 2015; Bianco & Leech, 2010; Reis et al., 2014). In fact, one of the main problems with the research on twice-exceptionality is that no two definitions are alike and the possibilities for potential diagnoses are endless (Ronksley-Pavla, 2015). While research on twice-exceptionalism has been growing, there is still a lack of intensive study on this population due to the difficulty of identification (Maddocks, 2018). Although identification is an important first step in providing the services needed for students who are gifted with a learning disability (GLD), and "from a theoretical point of view, identification is the critical first step to provide GLD students with the services and instruction they need" (p.175). Twice-exceptionalism is not unique to recent trends in educational research, however. As early as 1923, educational researchers were describing students with high IQs in possession of other characteristics that made school difficult for them (Lee & Ritchotte, 2018). Legislation such as the Gifted and

Talented Children Educational Assistance Act, passed in 1969, and the Elementary and Secondary Education Act and Educational Professional Development Act focused more attention on the creation of professional development programs that focused on the creation of curriculum initiative focused upon the gifted and talented (Lee & Ritchotte, 2018, p.69). The Marland Report of 1971 created the standard most states adopted by presenting a more universally accepted definition of gifted and talented students in the United States by stating that these students "need different programs or services from regular school programs" where they "excel in one or multiple academic/ability levels" (Lee & Ritchotte, 2018, p. 69).

Identification of Twice-Exceptional Students

Because of the multiplicity of factors that can make up the learning profile of a twice exceptional student, identification of students needing specialized services is often problematic. Students diagnosed with learning disabilities are often not even a part of the population that counselors, teachers, and administrators consider as potentially gifted and qualifying for services (Baldwin et al., 2015; Barnard-Brak, et al., 2015; Bianco & Leech, 2010; McCallum, et al., 2013; Siegle, et al., 2016). When comparing referral ratings of students to gifted programs from general education, special education, and previously identified gifted populations, Bianco and Leech (2010) found that teachers more knowledgeable and more experienced in recognizing the characteristics of giftedness were more likely to identify students in the learning-disabled population as gifted. Identification is still cited as a problem because states often interpret definitions of twice-exceptionalism differently and "relied on test score cut-offs or intelligence quotient (IQ) and did not address a broad range of talents" (Lee & Ritchotte, 2018, p.69).

Reis, Baum, and Burke (2014) found that there is a demonstrated need in schools to test students for the traits of both giftedness and a learning disability. Although research on twice-

exceptionalism has been increasing, there is still a lack of intensive study on this population due to the difficulty of identification, therefore it is possible to examine the challenges to identification of gifted students and learning-disabled students separately to better understand the phenomenon (McCallum et al., 2013; Ng, Hill, & Rawlinson, 2016). To further exacerbate the problem, racial disparities have emerged in terms of identification. Travers and Krezmien (2018) undertook a study on autism identification through which they analyzed the recently expanded racial categories for federal reporting and they found variances not only between racial categories, but across states as well. "Latino students were under-identified in the highest number of states, followed by African American students, Asian students, and America Indian or Alaskan Native students" (p. 413). Although the study clearly points to chronic under-identification of racially diverse groups, researchers indicated that very few states have been found to be out of compliance in regard to federal Individuals with Disabilities Education Act (IDEA) guidelines.

Challenges. Significant challenges exist for twice exceptional learners and those who teach them. In addition to the variety of learner profiles and difficulties in initially identifying students for twice exceptional services, teachers are often inadequately trained. Reis, Baum, and Burke (2014) pointed out that rather than concentrating learning strategies on the strengths of twice exceptional students, teachers often focus upon their disability. Underachievement is often the result. Berman, Schultz, and Weber (2012) examined the preconceptions of pre-service and in-service teachers when it came to gifted learners. Their results showed that although they believed training and experience was crucial in engaging gifted learners successfully, teachers themselves felt inadequately prepared to challenge the brightest students.

A distinctive push has been made in recent years to provide Advanced Placement and college credit classes to students at the high school level. The May 2014 College Board testing administration consisted of 2,342,528 students taking 4,176,200 exams at 19,493 high schools (College Board, 2014). States across the nation are adopting programs where high school students can attain college credit for classes taken at the college-level while still in high school. The state of Ohio, for example, has mandated that all secondary schools within the state adopt dual credit programs and options for all students (Ohio Board of Regents, 2013). With the increasing number of students involved in these programs, enrollment of twice-exceptional students involved in the programs is also naturally increasing. Little data has been collected, however, on the numbers of twice-exceptional students involved in for college credit and Advanced Placement classes.

Schultz (2012) found that twice-exceptional student participants defined "successful participation" in AP and credit-for-college classes differently. Six themes were identified as being important for success. They included "the importance of school culture, interpretations of equity, test and environmental accommodations, the importance of early education, mentoring and familiarity with the twice-exceptional student, and positive experiences with teachers" (Schultz, 2012, p. 122). Data analysis indicated that students who received identification as "twice-exceptional" and appropriate services early in the school career experienced more success in AP and for-college-credit classes. Another study (Mayes et al, 2014) focusing on twice-exceptional African American students showed that despite having documentation of their needs in IEPs, all participants felt that they did not receive required and necessary accommodations. Participants felt a lack of connection to their teachers. Despite this, however, participants expressed the need to work hard to overcome disabilities and still identified at least one teacher

to which they felt connected. Communication between educators and the participants was problematic. Several of the participants felt looked down upon and bullied by fellow classmates due to these disabilities. All participants expressed interest and worries about future education and careers. The participants stated they only had a small amount of exposure to school counselors and only three of the participants believed their interactions were positive.

Twice Exceptional Curriculum and Pedagogy

The study of twice exceptional curriculum and pedagogy as a category is relatively non-existent. It is necessary, therefore, to examine studies on the individual categories of giftedness and learning disabilities and draw parallels between the two.

Successes and failures. Several studies have identified strategies that can be utilized when striving for academic success for twice exceptional students. Killoran, Zaretsky, Jordan, Allard, and Moloney (2013) found that teachers supported a common curriculum and set of strategies for twice exceptional learners. Like the studies of Berma, Schultz, and Weber (2012) and Bianco and Leech (2010), however, teachers often felt at a loss for knowledge and support. Researchers advocated for the creation of a teacher support network for teachers (Killoran et al., 2013). The problem is that little evidence exists elsewhere in the literature that these supports are being utilized. Jeweler, Barnes-Robinson, Shevitz, and Weinfeld (2008) supported the use of accommodations through Individualized Education Plans (IEPs) to ensure that students have access to computers and read aloud software for reading and writing, extended test taking time, and taught strategies for organization and the improvement of reading and writing skills. While many of these methods are currently being used by teachers to aid students with learning disabilities, the difficulty remains in the lack of knowledge on how to challenge this group of students that have also been given the gifted designation (Barnard-Brak et al., 2015; Szymanski

& Shaff, 2012). Conclusions from a study on barriers twice exceptional students experience concluded that a program needs to be implemented through which the identification of twice exceptional students is followed with an approach that encompasses not just the academic needs of students, but also their social and emotional needs (Siegle et al., 2016). Lee and Ritchotte (2018) stated, "Working successfully with this unique population requires specialized academic training and professional development" that "ensure the child's academic success and social-emotional well-being such as accommodations, therapeutic interventions, and specialized instruction" (p. 71). Another obstacle found in terms of aid to twice-exceptional learners was socioeconomic status and geographical setting. Parents were found to be more likely to seek aid for their children with special needs if they were white and were diagnosed on the autism spectrum (Cooc & Bui, 2017). The parents who were least like to seek extra help were parents of low socioeconomic status and those who lived in rural geographical areas. To provide well-rounded services to twice-exceptional students, all stakeholders must be involved: student, parents, teachers, and administrators.

Perceptions. Twice exceptional learners often feel low self-esteem and little trust in the adults in their lives. Barber and Mueller (2011) conducted a study identifying 90 twice exceptional students as participants. Their results indicated a lower sense of school belonging, self-concept, and relationship to a parent among twice exceptional students when compared to students of other groups. This often translates to difficulty with this group's sense of connection to the teacher in the classroom of the twice exceptional student. The study results of Berman, Schlitz, and Weber (2012) indicate that teachers do not understand how to adequately accommodate the diversity of learners in their classrooms. Willard-Holt, Weber, Morrison, and

Horgan's (2013) research on effective learning strategies as perceived by twice exceptional learners pointed to a lack of understanding and engagement on the part of the teachers.

Gifted Curriculum Implementation

Programs for gifted students are in of themselves guidelines that must be adhered to so that students who are labeled as twice-exceptional can excel. VanTassel-Baska (2015) identified six mistakes schools often make when designing curriculum for gifted students. First, schools often only utilize one test to identify gifted students while ignoring scores on individual subject tests and class performance. Second, there are readily available curriculum sets such as the Advanced Placement (AP) and International Baccalaureate (IB) programs that have designed standards meant to engage students in higher level thinking skills and tasks. Thirdly, curriculum for the gifted is often designed by individual teachers, while a team approach may be more beneficial. Fourth, teachers often believe that there is not a need for differentiation, when in fact, the designation of gifted does not necessarily mean that students learn in the same way. Fifth, different levels exist on the spectrum of giftedness. Appropriate learning strategies need to be employed and a determination of how advanced curriculum should be needs to be made. Finally, gifted students need to be assessed in alternative ways to show growth other than whether they have only met the proficiency levels set by the states and national agencies. These guiding principles can aid teachers in the construction of a relevant and efficacious gifted learning program that can also challenge the student with a specific learning disability. Many teachers, however, especially new teachers, express feelings of inadequacy when handling the gifted and learning disabled (Rowan & Townend, 2016; Townend & Brown, 2016).

Through their research, Callahan, Moon, Oh, Azano, and Hailey (2015) reiterate the mistakes often made by schools and expand upon them through the study of three widely

accepted models utilized when creating gifted programs. The differentiated instruction model, for example, is meant to ensure that students can learn through a variety of methodologies that change the "content, process, and product-based on variation across student characteristics of readiness, interest, and learning profile" (p. 140). Differentiation has been a methodology used by teachers in classroom of varying abilities and learning needs and therefore can be effective for the twice-exceptional student (Jefferson, Grant, & Sander, 2017). The depth and complexity model focuses the curriculum and instructor on the teaching of higher level thinking skills through fewer topics with greater complexity. The Schoolwide Enrichment Model (SEM) incorporates differentiation, depth and complexity and adds to it the widely accepted use of authentic assessment. Williams (2017) defined authentic assessment as the opportunity for students "to learn and grow through self-reflection, meaningful assignments, internships, service learning, and meaningful feedback from others" (p. 265). Authentic assessment is often believed to be one of the most effective methodologies in curriculum development because it better prepares students for the types of work they will be doing in the future (Callahan, et al., 2015; Parkay, Anctil & Hass, 2014; VanTassel-Baska, 2013). Another study in Hong King found that teachers taking part in a workshop on differentiation reported more confidence with incorporating differentiation to their teaching models (Yuen et al., 2018). Organized by the Centre for Advancement in Inclusive and Special Education of the University of Hong Kong and the Gifted Education Section of the Education Bureau, the workshop's objectives included creating professional opportunities to advance teachers' knowledge in and confidence in using differentiated teaching strategies. Researchers acknowledged that with the trend toward the use of mixed-ability classes, gifted students often found themselves to feel unchallenged. The study incorporated the use of a three-hour lecture and a six-hour workshop where teachers and

curriculum leaders learned more about specific differentiated strategies that could be utilized in the classroom. Afterward, participants completed a survey based on a four point Likert-type scale that found the biggest impact was the effect of motivating teachers "to think more about the needs of gifted students in curriculum and lesson design" (Yuen et al., 2018, p. 42).

Research showed that students can achieve at a higher level of learning when curriculum is structured and standards are utilized (Missett et al., 2016; VanTassel-Baska, 2012). VanTassel-Baska (2012) believed that the implementation of standards was an important first step to ensuring that like other students, the gifted are held accountable to a universal set of expectations. She believed, however, that the currently accepted Common Core State Standards (CCSS) are lacking in the needed rigor.

Teaching Methodologies for the Gifted

Some teachers believe that this relegation of most districts across the country to a common set of standards has led to a loss of the ability to use a variety of curricular and pedagogical techniques and instead, they must conform to a common set of lessons for all students across the school. In a study of teacher conceptions and curriculum ideologies regarding the standardization of curriculum in one school district, researchers found that teachers were often not adhering to their beliefs on how to teach due to the implementation of a common set of standards for all students (Allen & Hunsaker, 2016). In a nod to the theory of "New Taylorism" one school district studied by Allen and Hunsaker (2016) underwent a linear change for implementing more efficient teaching, curriculum construction, and communication methodologies. The district incorporated computers so that textbooks could be replaced, standardized tests were given to students in common subject areas, and common curriculum maps were provided to teachers instructing the same subjects. Because of the pressures on

teachers and students to perform on the resulting standardized tests, researchers conjectured that students labeled as gifted and talented were not being challenged in the ways they should and instead, were feeling different types of pressures associated with the standardization of curriculum and testing (Allen & Hunsacker, 2016). The study concluded that there were pressures on teachers and students due to the high stakes testing. The pressure of performance on these tests resulted in teachers implementing drill and practice procedures in efforts to get students to remember the material covered on the test and this pressure was even greater in schools that were labeled as being disadvantaged. The result for gifted students was that the feeling of the "pressure to perform well to bring up all schools oftentimes result[ed] in disengagement from the learning process" (p. 200).

Multiliteracies theory is one methodology accepted as an effective practice to be used when creating gifted curriculum that may be effective for the twice-exceptional learner (Olthouse, 2013). Researchers conducted a case study through which the researcher examined whether allowing students choice in what they learned impacted the overall scores of gifted students. The high school example case allowed students in AP English to choose the novels they read before beginning the course in the fall. The teacher set up an online learning community and along with allowing the students to discuss what they were reading, she invited local professors and literature experts to join in on the discussion. Through this environment, students experienced a variety of opinions and suggestions for additional resources. This instructional method of choice feeds into a strengths-based, talent-focused curriculum that can be effective for twice-exceptional learners (Baum et al., 2014; Foley-Nicpon et al., 2015; Mayes & Moore, 2016).

The EPTS Curriculum Model is another example of a thorough methodology in developing a gifted curriculum that integrates intelligence theory along with creative, researched techniques to deliver the content effectively (Sak, 2016). The part, however, that is missing in its successful implementation is the component of specific knowledge. Specific content standards are still needed for gifted curriculum to not only provide the tools necessary to advance critical thinking, but to provide the basic knowledge base for the creation of curriculum content (Missett et al., 2016; Sak, 2016; VanTassel-Baska, 2012). With the utilization of the ETPS Curriculum Model in after school programs conducted for sixth, seventh, and eighth grade students, "significant growth gains in mathematical creativity and competency, scientific creativity and creative writing and linguistic competency have been demonstrated for gifted classes" (Sak, 2016, p. 686). The program, conducted in conjunction with a local university, also examined the EPTS program's social validity to investigate students' perceptions of the program and their own learning. Students felt challenged and wished to continue in the programs. Significant to teachers when developing these types of programs is that the study revealed that at least 25% of the course content was made up of upper level standards. It is also important to note that the "regular courses of students were compacted and accelerated 40%" (p. 687). This was significant to the planning and development stages of gifted curriculum.

Often, programs outside of the core content areas lack a plan for implementing gifted curricular strategies. Researchers conducted an empirical study of a developed program for eleventh graders in South Africa through which they evaluated the implementation of the Accounting Enrichment Program (AEP) (Singh, 2013). The AEP aimed a program of self-regulated learning (SRL) strategies toward gifted students so that they would be challenged in the accounting program. Researchers noted that in SRL, "the teacher's role function undergoes a

metamorphosis" (p. 107). Rather than directing student learning, students were given problems through which they were required to direct and pace themselves in their learning. Students were asked to differentiate, analyze and interpret financial data from real world businesses. The study aimed to determine whether there were differences in scores on higher-level problem-solving questions between the pre- and post-tests and between the experimental and control groups. The study concluded that while there was no statistically significant difference between the control and experimental groups on the pre-test, there was a statistically significant difference on the post-test, concluding that that the SRL methodologies had a positive impact on the learning of gifted students.

With the increased pressures to motivate students to perform on state tests and boost not only school ratings, but the evaluations and data of individual teachers, some teachers feel pressured to replace the methods they know to be effective in motivating gifted students with those designed for the sole purpose of performing well on a state test. In fact, Allen and Hunsacker (2016) concluded in their qualitative study investigating four teachers in one district that had implemented a standardized curriculum for all students, that although the implementation of data technology aided teachers in identifying student needs and proficiencies, many had abandoned their long-standing ideologies on the best ways to teach and motivate students for practices solely aimed at increasing student performance on standardized tests. VanTassel-Baska (2013) believed that the gifted curriculum should be an extension of the common standards and curriculum and give students the ability to learn more rapidly, more in-depth and utilizing choice in research for enacting their own interests. In practice, however, this does not appear to be occurring in today's schools and classrooms. Many recommend that rather than placing all students in the same classrooms with the same methodologies, a better model

may be to create schools within schools for gifted students (Callahan et al., 2014; Choi, 2014; Sak, 2016; VanTassel-Baska, 2013). Additionally, this may be a practice to consider due to the socio-emotional needs experienced by twice-exceptional students. Characteristics often experienced by gifted students such as "being too sensitive to stressors and conflicts, deep perception, and overexcitability" may lead to the perpetuation of feelings such as loneliness and be the precursor to other social and emotional risks (Ogurlu, Yalin, & Birben, 2018). These needs must also be considered when professional development is being created.

Choi (2014) examined the use of the small school approach in secondary education in Korea where specialized academies for students in gifted science, technology, engineering, and mathematics (STEM) have been created. The program's emphasis on "developing and asking research questions, designing a study, collecting and analyzing data, and drawing conclusions" enacts methodologies that can challenge and motivate gifted high school students (p. 25). These academies have been developed for growing the future leaders in the STEM areas so that their accomplishments can help to promote South Korea on the global stage. The program mandates that students take anywhere from 165-172 credits to graduate. This requirement necessitates students signing up for higher level courses that many students would not have exposure to until attendance at a university or college. As a result, most students apply and gain admission to competitive universities around the world with approximately 83% of students graduating within three years from the program.

Walker and VanderPloeg (2015) found similar results in their study on the graduates of a gifted program within a school. Researchers surveyed graduates of a gifted program in the high schools of Virginia for determining how past participants in the program could aid current students academically, whether the gifted program was successful in meeting the needs of gifted

students, and after attendance at a higher institution of learning, what did graduates see as the strengths and weaknesses of their gifted program within the high school they had attended. When designing the contained gifted program within the high school, teachers and administrators had consulted several integrated curriculum models along with consulting the recommended standards for the gifted set by the National Association for Gifted Children. In a mixed-methods design, Walker and VanderPloeg (2015) collected both open ended responses to questions of graduates of the gifted program and data from a Likert-type scale questionnaire. Ninety-seven percent of the respondents believed that the contained gifted program had provided them an adequate challenge and 93 percent of students believed that they had attained the skills necessary to be successful in college. Worthy of noting is the fact that many students pointed out specific teachers, courses, and teaching methodologies that they found to be useful. Particularly compelling was that students commended "the levels of challenge, individualization, and support from both peers and teachers" in the contained high school program for the gifted (Walker & VanderPloeg, p. 168).

This small group approach for gifted curriculum was additionally supported in a five-year longitudinal study of curriculum and teaching practices (Peterson & Lorimer, 2012). In a standalone school for the gifted, class sizes were reduced to increase learning among gifted students. Students who took part in these small groups reported that they felt emotionally, socially, and academically better prepared for their work. Over a two-year period, results trended upward in measurement of positivity of experience, skills of teachers and students as facilitators, and academic achievement. An area of interest was the program implemented by the school to train the teachers in gifted curriculum as facilitators and content leaders. This emphasis on training the teachers on the benefits of a variety of curriculum and promoting them

as leaders goes a long way in ensuring that the needs of both students and teachers are being met (Callahan et al., 2015; Parkay et al., 2014; Peterson & Lorimer, 2012).

As shown in the small group approach to gifted curriculum, the effectiveness and training of a teacher for the gifted is important to the overall success of students. Missett, Azano, Callahan and Landrum (2016) reiterated this in their research on twice exceptional students. Their study defined twice-exceptional students as demonstrating strong academic growth or potential while in possession of a disability that prevents even stronger academic achievement. In what is referred to as the clear curriculum model, researchers investigated the effects of two curriculum units created with the intention of challenging a variety of different types of gifted learners. The case study conducted showed that teacher expectations played a heavy role in whether students felt they had the ability to achieve the tasks set before them. Through a series of interviews conducted of 55 teachers in one school, researchers found that the teachers were generally better able to discuss the weaknesses of students rather than their strengths. It was found that teacher expectations of students "were reflected in the instructional choices she made and the strategies she used" (Callahan and Landrum, 2016, p. 24). For a teacher not well-versed in gifted curriculum, this could lead to instruction that is less than ideal and motivational.

In the most recent iteration of the Elementary and Secondary Education Act (ESEA) passed in 1965, the government passed the Every Student Succeeds Act (ESSA) in 2015 (Kaul and Davis, 2018). ESSA stipulated that each state submit a comprehensive plan that addressed the need for teachers to receive professional development in effective instructional strategies as part of its Title II obligations. Out of the approved plans, there were only 16 states that "explicitly addressed how educators would be supported in identifying and providing gifted learners with effective instruction, and 15 states generally described educator support to meet the

needs of multiple groups of students" (p. 159). The state of Ohio was one of the 16 states that

explicitly referenced a provision for general education teachers to receive training on gifted

instructional strategies from state-recognized gifted specialists. While ESSA's goals include a

roll-out of instructional strategies to meet the needs of all students, it is up to future researchers

to determine whether this professional development has been carried out with fidelity.

Goal Setting

It is important that both teachers and students set goals for curriculum and learning. In

fact, research shows that when individuals have a mastery goal orientation, they more readily

take part in tasks that will lead them to successful completion of their goals (Little, 2012).

Conversely, if a student is motivated to a performance goal orientation, they are only worried

about what they will be rewarded with at the end of the activity. Research reveals that there are

several components in curriculum building that will motivate students to more of the mastery

goal orientation so that they can truly achieve (Little, 2012). It is important that the curriculum

designed for students is relevant and important enough to the individual that they will be willing

to devote time to its completion (Little, 2012). Teachers must also show an interest in getting to

know the students' needs and interests so that their students feel motivated to learn. The belief

that the teacher occupies the role as motivator for twice-exceptional students has shown to have

had significance in previous studies (Missett et al., 2016; VanTassel-Baska, 2013). Teachers

must not only understand the importance of the curriculum themselves, but more importantly,

they must be able to communicate this value in such a way as to motivate students and aid them

in deepening their understanding of the importance of the task at hand (Little, 2012). Teachers

must not only learn to reflect on how to make learning relevant for students, but also on how to

provide a curriculum that recognizes the diversity and varying needs of the classroom's learners.

There has been a general feeling that often underachievement coincides with the characteristics of many gifted students (White, Graham, & Blaas, 2018). Teachers cannot use this as an excuse, but instead as an impetus to finding the instructional strategies that can reach individual students. White, Graham, and Blaas (2018) did not find strong indicators that specific factors contributed to perceived underachievement, therefore, underachievement ceases to be an excuse to the success of twice-exceptional students.

It is important that curriculum is implemented with fidelity (Azano et al., 2014; Brunner, 2014). Although there are many proven, researched curricular methodologies for ensuring gifted students are motivated to learn, it is up to the teachers to make sure that the curriculum is being implemented in the way that they were intended. Through a mixed methods study, researchers examined performances of gifted students in rural, urban, and suburban schools (Azano et al., 2014). Their results showed that students were more motivated and made significant growth in learning when teachers were confident in their own professional knowledge and their belief that students possessed the necessary qualities and abilities to accomplish difficult tasks.

Inclusive General Education Classrooms

Movements pushing for the inclusion of special education students in the general education setting have ebbed and flowed over the last several years. Inclusion as a general concept has several meanings within the educational context (Felder, 2018). The incorporation of inclusion naturally has impacted the twice-exceptional student as they are defined within the special education environment (Baldwin et al., 2015; Barnard-Brak, et al., 2015; Bianco & Leech, 2010; McCallum, et al., 2013; Siegle, et al., 2016). In some school settings it may mean that students are housed under one roof with equal access to resources, while in other schools it may mean that each classroom replicates the demographic and academic profile of the greater

school. Felder (2018) stated that the approach to the study of inclusion in the educational setting must take a "basic and fundamental approach…as the discipline of education still lacks enough coherent theoretical and conceptual proposals that would allow for an extensive, detailed and nuanced debate about the fundamentals of inclusions across different theoretical and conceptual positions" (p. 55). In other words, more research needs to take place on the pros and cons of inclusion in the educational setting.

While the Individuals with Disabilities Act (IDEA) advocated for inclusive education and pointed to over 20 years of research that supported this move, many teachers remain divided and unsure about how to carry the initiative into their classrooms (Tomlinson, 2018). The definition of inclusion not only encompasses a wide variety of learning styles, but also promotes an environment where different languages, cultures, and races could be seized upon by teachers well-versed in their value for learning. Tomlinson believed that the value and essence of inclusion was meant to duplicate the diversity seen in society. Ultimately, studies on inclusion have shown that students can benefit socially, emotionally, and academically (Ballard & Dymond, 2017; Clarke et. al., 2015; Felder, 2018). Although teachers expressed their lack of knowledge on how to best teach all students in an inclusive setting, the evidence for student success is compelling (Tomlinson, 2018). Tomlinson (2018) identified two themes that emerged in one case study of an untracked American history class. Students who had always been tracked in a general education classroom prior to being placed into an inclusive classroom expressed how they now valued all students' opinions more along with their ability to learn. Students who had been in tracked lower ability classes previously expressed how they now believed for the first time that they could be successful in school because they had been treated like other students (Tomlinson, 2018).

Teachers' dispositions and belief systems have an effect on the success of students with disabilities in inclusive classrooms. Bialka (2017) stated that teacher dispositions should be examined in a way as to differentiate between their beliefs about education and learning and what they actually practiced within the walls of their classrooms. Findings from a case study through which three pre-service teachers participated found that teachers' beliefs and actions were impacted more by their fieldwork and coursework during their graduate studies than any experiences they had with students with disabilities previously (Bialka, 2017). More importantly, the study revealed that the teachers' attitudes toward these same students with disabilities correlated positively to their success in the inclusive educational settings. But because many teachers feel unprepared to teach students with disabilities in inclusive classrooms, the study revealed that teacher disposition impacted students negatively (Ballard & Dymond, 2017; Bialka, 2017; Clarke et. al., 2016). Although teachers stated they supported the inclusion of students with disabilities in their classrooms, they revealed that at the same time, they did not feel comfortable that they were adequately meeting their academic and social needs. Since 61% of students with disabilities are receiving services in inclusive classrooms, the numbers of students impacted by their teachers' dispositions and attitudes is significant (Bialka, 2017).

The Individual with Disabilities Education Act (IDEA) states that the curriculum should be the same for disabled and nondisabled students (Ballard & Dymond, 2017). The Every Student Succeeds Act (ESSA) passed in 2015 reiterated this idea by stating that all children should have the same access to services and make the same rates of progress. Each state is now required to create the same opportunities for students with disabilities in the general education classroom as they do all other students. Although equitable access to curricular standards should

be the same for all students, educators are still struggling with the fact that students with disabilities may need other accommodations and education in life skills that other students may not require (Ballard & Dymond, 2017). All educational stakeholders, including administrators and general and special education teachers should, but do not necessarily possess, a shared vision for students in an inclusive classroom.

In their study addressing curriculum in the general education classroom, Ballard and Dymond (2017) identified four stakeholder themes. The first theme, method of access, addressed such things as a positive learning environment, adult supports being present in the classroom to help students with disabilities access the curriculum, the ability to adapt and modify the given curriculum for all learners, and the ideology that the general education classroom was the best place for all learners to access the curriculum. The second theme addressed in the study was type of curriculum. In fact, the portion of the curriculum that was considered to be most important was social skills and the opportunity for students despite disability to interact with one another. Having a curriculum balanced between standards-based and individual needs was deemed significant to a successful, inclusive classroom. Although the study pointed to exposure to rigorous academic expectations as being important to inclusive classrooms for reasons of equity, it was not necessarily seen as a priority. The third theme identified during the study on inclusion involved barriers and concerns. Stakeholders concerned themselves with whether the curriculum was appropriate for all learners and whether it could be adapted to Individual Education Program (IEP) goals. Another obstacle identified by stakeholders revolved around collaboration and whether general education and special education teachers had the ability, time, and wherewithal to collaborate in a manner that was beneficial to the learning of all students in an inclusive environment. Finally, a fourth theme emerged involving benefits. Stakeholders

identified positives as increased social interaction and communication between all kinds of students and an increased sense of social well-being and ability to adapt to multiple, changing environments. Ultimately, the study found that educators and parents believed that severely disabled children were more likely to take part and enjoy activities and were more socially active when they were placed in inclusive educational settings.

Although studies point to many positives, especially in terms of social interactions for students with disabilities in inclusive classrooms, research shows that high school students with autism spectrum disorder (ASD) still have few interactions with their peers. According to the researchers, ASD students in inclusive, general education classrooms increased from 39.6% in the 2000-2001 school year to 57.6% in the 2011-2012 school year (Carter et al., 2017). While trends continue to note a rise in the numbers of students with disabilities being served in inclusive environments, research does not indicate a rise in peer to peer actions for students with ASD (Clarke, Haydon, Bauer, & Epperly, 2015; Nilson, 2018).

In a pilot study examining peer supports for students with Autism Spectrum Disorder (ASD), researchers paired ASD students with a peer partner who was willing to be trained in supports for that student (Carter et al., 2017). Peer partners were seated closely together, worked with one another during partner activities, and had regular check-ins with their partner throughout the class. Results showed that although peer-to-peer interactions increased during the study period, interactions initiated by the student with ASD increased only minimally. Although there were no negative academic connotations during the study period, neither did researchers observe any substantial increase in academic performance.

Another study examined methods through which students with a disability may increase their participation and responses in the inclusive environment (Clarke, Haydon, Bauer, &

Epperly, 2016). Researchers examined how response cards, a dry erase board or pre-printed signs, could be used by students to increase their participation during classroom activities and discussion. The students selected in the study had high rates of on-task behavior, but had very low response rates to teacher questions. Results determined that the response cards did increase student participation among students identified with a disability and reinforced earlier studies that response cards and methodologies other than the raising of hands can have a positive effect on participation when used by teachers for all types of students (Clarke et al., 2016; Gavish, 2017; Nilsen, 2018).

In addition to the positive social and academic impacts inclusive education has evidenced, the practice also points to an increase in students with disabilities attending two and four-year post-secondary institutions, with the biggest impact being on students who attended a two-year college (Joshi & Bouck, 2017). Students with disabilities who received their core content instruction in general education classrooms were more likely to successfully be admitted and to attend post-secondary institutions. Although studies show additional correlations between grade point average, friends' plans to attend college, and socioeconomic status and college attendance, evidence is still strong enough to prompt schools to provide transitional services and counseling to students and parents who can make choices to be educated in an inclusive environment (Joshi & Bouck, 2017; Tournaki & Samuels, 2016).

The inclusion movement has prompted various educational systems to view the roles of teachers differently. Whereas in the past, general education and special education teachers were two separate entities, the two sides must now work collaboratively to serve all students. Special education teachers in Israel, for example, now serve as co-teachers in an inclusive environment or as instructors in self-contained classrooms for the most severely disabled (Gavish, 2017). In a

phenomenological multi-case study, Gavish (2017) found that teachers experienced feelings about their vocation along a spectrum varying from a sense of aloneness in the job to a sense of euphoria and connectedness to fellow teachers in the quest to collaborate for a successful inclusive educational environment. The researcher concluded that staff members were helped along to the more positive aspects of this classroom through support by administration and professional training in inclusion (Gavish, 2017; Tournaki & Samuels, 2016).

With longstanding belief of impact on the educational system, teacher efficacy remains at the forefront of successful inclusion in general education environments (Carter et al., 2017; Yadav, Das, Sharma, & Tiwari, 2015; Nilsen, 2016; Tournaki & Samuels, 2016). Several studies have shown that when teachers believe in their own efficacy, they demonstrate more patience and willingness to be flexible with curriculum, activities, and interactions with severely disabled students in their classrooms (Tournaki & Samuels, 2016). Teacher efficacy impacts the belief in professional development, while professional development in inclusive practices for all students, including those who are twice-exceptional, indicated increased social interactions, academic performance, and desire to move onto post-secondary education (Joshi & Boick, 2017; Sanajuga-Gavalda, Olmos-Rueda, Moron-Velasco, 2016; Tournaki & Samuels, 2016; Zagona, Kurth, & Macfarland, 2017).

Teaching Communities and Professional Development

Twice-exceptionality has been recognized in the literature for the last 50 years and these learners have always been a part of the world of education (Baldwin et al., 2015). The diverse needs of this student population have necessitated continual re-evaluations and revised implementation of curriculum and instructional methods. Professional development in the world of twice-exceptionality has long been lacking and a contributing factor to identification and long-

term success (McCallum et al., 2013). In one study of 200 new teachers of twice-exceptional

and gifted students in 30 different schools, researchers found that while they felt prepared in the

areas of pedagogy, assessment, professional ethics, and engagement with ongoing learning,

teachers felt the least prepared in the design and implementation of curriculum, classroom

management, and professional engagement with parents (Rowan & Townend, 2016). The long-

term significance of these areas is crucial to the continued improvement of the experiences for

twice-exceptional students. Professional development can aid teachers in developing the

relationships needed for long-term success for students and themselves. In one study of parents

of twice-exceptional students, results indicated that the primary caregivers, usually the mother,

were willing to seek support regardless of the cost and inconvenience and though they attempted

to normalize the disability and maintain high expectations for their child, the mothers in the

study ultimately realized that their children held the primary responsibility for success in school

and in life (Neumeister, Yssel, & Burney, 2013). This connection that new teachers construed

they felt ill-prepared for is an important one for teachers of the twice-exceptional.

The ability of teachers to navigate relationships is significant as studies show that twice-

exceptional students are not only influenced by their learner traits, but also by those around them

such as parents, teachers, and peers (Neumeister et al., 2013; Wang & Neihart, 2015). Wang and

Neihart (2015) found in their qualitative study of six twice exceptional students in a secondary

school in Singapore that external supports influenced students' strategy use, their academic

engagement, and their self-efficacy. In fact, "results showed that supports from teachers,

parents, and peers were endorsed by the students to be one of the biggest contributing factors to

their good academic performance" (p. 153). In a case study of one 16-year-old twice-exceptional

male student, researchers found that although he had a good attitude toward school, the subject

revealed low self-concept scores and internalized many problems, including anxiety and difficulty socializing (Townend & Brown, 2016). Even though this student felt supported by parents and teachers, success in his own eyes was not being actualized. From a social justice point of view, equitable education is a must-have for twice-exceptional students (Cook, 2017). Counselors, not just teachers, can support students with identified disabilities so that they can successfully transition to post-secondary education and their futures. These types of issues point toward a need for ongoing, diverse, and collaborative professional development opportunities for teachers of twice-exceptional students (Wang & Neihart, 2015; Willard-Holt, Weber, Morrison, & Horgan, 2013).

Summary

Recent research shows that twice-exceptional students are diverse in their needs for differentiated instruction, attention to cognitive and psychological disorders, environmental factors, and curricular needs (Baum et al., 2014; Mayes & Moore, 2016; Ng et al., 2016). Although significant research has been done on the effective strategies and needs of gifted and learning-disabled students in and outside of the classroom pedagogically and emotionally, there appears to be a disconnect in teacher utilization and comfort levels with students who are both gifted and learning disabled (Killoran et al., 2013; McCallum et al., 2013; Missett et al., 2016). Currently, there is little research on the teachers' experiences instructing in the twice-exceptional world. Through a phenomenological study of the lived experiences of teachers of these twice exceptional students, the goal is to identify the themes and essence that make up these teachers' daily experiences in teaching twice exceptional students.

CHAPTER THREE: METHODS

Overview

The research design and research questions are discussed in this chapter. The transcendental phenomenology of Moustakas (1994) formed the basis of the design of this study. The phenomenological approach allows for the opportunity to give general education teachers of twice-exceptional students a voice (Creswell, 2007). Individual interviews, online focus groups, and writing responses to prompts about teachers' experiences with twice-exceptional students were the methods of data collection. Methods of data collection and analysis are featured with the researcher's role being clearly explained within the context of the study. Trustworthiness and the ethical considerations taken in the study are discussed.

Design

Qualitative research "calls for critical reflection on one's assumptions about and expectations of teacher, student, and the limitations of learning within traditional academic classes" (Piantanida & Garman, 2009, p. 3). A qualitative research design was selected for this study because although a great deal of quantitative and qualitative research exists on the characteristics of twice-exceptional students and effective instructional strategies for these students, little research exists that gives a voice to those instructing them and how their experiences may inform the pedagogy in the classrooms (Baldwin, Omdal, & Pereles, 2015; Baum, Schader, & Hebert, 2014; Gari, Mylonas, & Portesoca, 2015). Phenomenology is the study of the human experience and because people bring different experiences to the table, phenomenological research permits a study from the first-person perspective (Gallagher, 2012). A qualitative phenomenological design focuses on participants in their natural settings and allows for the establishment of common themes and patterns (Creswell, 2013; Moustakas, 1994).

Because no known studies capture the attitudes and overall essence of the experience of general

education teachers of twice-exceptional students at the high school level, the qualitative

phenomenological design will allow the researcher to investigate the phenomenon without

barriers set by previous research. This study is concerned with the commonalities of the

experiences of teachers of twice-exceptional students at the high school level qualitative research

allows for the creation of "a composite description of the experience for all of the individuals"

(Creswell, 2013, p. 76).

The transcendental phenomenology of Moustakas (1994) focused on the identification of

a phenomenon after which the researcher collected data from subjects who had experienced the

phenomenon and then created an overall picture. Through his methodology, Moustakas was able

to not just effectively describe the phenomenon itself, but also provide a description of how the

subjects experienced it. In the development of his ideas, Moustakas relied heavily on the ideas

of Husserl (1931), who unlike many of the scientists of his time, embraced the idea that "natural

knowledge begins with experience and remains within experience" and that researchers needed

to find the clear essence of that experience (p. 9). Moustakas acknowledged that although his

peers did not take him seriously during his time, Husserl's ideas were revolutionary and enabled

Moustakas himself to embrace the philosophical nature of the study of phenomena and

incorporate it into his research design.

A transcendental approach was used so that the researcher could help to recognize her

own biases and through the writing in a journal about these beliefs could bracket herself during

the study (Creswell, 2013). Moustakas (1994) believed that that one of the four core processes

from which knowledge originated was the Epoche. Greek in origin, Epoche means "to refrain

from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving

things" (p. 33). This idea of bracketing oneself away from the experience is essential to allowing researchers to set aside preconceived ideas due to their own experiences with the phenomenon and allow a fresher perspective (Creswell, 2013). Husserl (2012) discussed the importance of describing the experiences of subjects as they are experienced naturally in their environment. Although the researcher has been a long-time teacher, she was aware that through Husserl's ideas of the epoche she must rule out her biases while researching.

Moustakas' (1994) design was appropriate for the study of twice-exceptional teaching because the researcher was attempting to uncover the overall essence of what it is like to be a teacher trained in general education yet be responsible for the learning of students who are not only gifted, but in possession of a learning disability. As a long-time general education teacher who has often felt frustrated with the incredible pressure of wanting to meet the needs of all her students, the researcher has questioned as to whether other teachers have shared many of these experiences. The researcher recognizes her own bias, and through Moustakas' design utilizing the epoche and bracketing one's self out of the research, the researcher hoped to be able to examine others' experiences and report on the essence of what it is like to experience the phenomenon of twice-exceptional students. When compared to quantitative research methods, the researcher does not believe that there is necessarily a definitive answer as to what this experience is like, and it was important to her to provide voices to teachers so that she could help to present more of this overall picture.

Sela-Smith (2002) criticized Moustakas' methods because she believed that his design took too much of the individual researcher out of the research steps and relied too much on the "idea of the experience" and that as a result, the design created an environment of ambivalence (p. 53). The researcher does not see this as being the case. Moustakas' design has the ability to

focus on individuals and paint a thorough picture of what it is really like to teach twice-exceptional students. Unlike other research designs, especially quantitative designs, it is impossible in the phenomenology to forget that the research participants are human beings and that experiences cannot always be boiled down to numbers, comparisons, and hypotheses. By using Moustakas' methods, the researcher was enabled with the capacity to show the humanistic nature of research.

Research Questions

The focus of this study centered around one research question. The central research question was: What are the shared experiences of general education teachers instructing twice-exceptional students? For the purpose of providing the researcher the ability to further interpret the experiences of general education high school teachers instructing twice-exceptional students, four sub-questions were used in the study.

SQ1: How do general education high school teachers instructing twice-exceptional students describe their experiences meeting the academic needs of twice-exceptional students in general education classrooms?

SQ2: What needs are to be addressed by general education high school teachers instructing twice-exceptional students to ensure the improvement of instruction for twice-exceptional learners?

SQ3: How do the perceived experiences of general education high school teachers instructing twice-exceptional students affect their self-efficacy when instructing twice-exceptional students?

SQ4: What obstacles, if any, prevent effective instruction from taking place in inclusive education?

Setting

This study was conducted with high school general education teachers of twice-exceptional students who were identified academically gifted with a specific learning disability. The sites included three high schools in one county in northeastern Ohio. The three high schools selected have faculties ranging from 90-120 teachers each with approximately 60% of the faculty members teaching one or more general education classes. Each high school has a student body between 1600-2000 students.

The rationale for this selection is that no known studies have examined the teaching of twice-exceptional students in northeastern Ohio. In 2002, the Ohio Department of Education's Office for Exceptional Children created the Ohio Gifted Task Force to examine the services provided by the state's schools for children identified as gifted (Campanelli & Ericson, 2007). The Ohio Gifted Task Force presented a report entitled *Gifted in the 21st Century: A Report of Findings and Recommendations.* The task force identified several findings in their report including problems with services being provided to students identified as gifted, problems with the identification methods for gifted students, funding issues, communications with families of gifted students, and most importantly to this study, problems were evident with identifying students in populations of students with disabilities (Ohio Department of Education, 2002). The task force recognized that "many special populations go unnoticed in the identification process" (p. 5) and that without appropriate examination of these issues, gifted education could not be provided. As a result of this study, the Ohio Department of Education prepared a guide to be utilized by its school districts to aid in the identification and service to these twice exceptional students. The Ohio Department of Education, however, recognized that these students were still not being identified by districts and teachers communicated a lack of awareness of programs

available and instructional strategies to be utilized by teachers of twice exceptional students (Campanelli & Ericson, 2007). In its latest report, the Ohio Department of Education's Office for Exceptional Children was still offering training for school districts and teachers on twice-exceptionalism, but did not indicate any improvement in the years succeeding the first report issues in 2002 (Office for Exceptional Children, 2016).

The three high schools selected represent suburban, rural, and urban areas of the county. Through the selection of high schools from different parts in the county, the researcher had a stronger opportunity to accomplish heterogeneity of sampling for data collection (Creswell, 2013; Patton, 2015). The pseudonyms for the three high schools used in this study are Glacial High School, Nordic High School, and Soar High School.

Participants

Three types of sampling were used in this study: criterion, snowball, and purposive (Creswell, 2013). The criteria for selection was a teacher with a minimum of three years' experience in a general education setting in a high school. The three-year mark was used because the state of Ohio recognizes teachers with three years of experience as qualified teachers and are not given the designation of unqualified in state reporting. The teacher must also have at least one twice-exceptional student assigned to them as indicated by the county's computer accountability program. Approximately 150 teachers were designated as being instructors of general education students across the three high schools. The actual pool, however, was dependent upon the number of twice-exceptional students enrolled in general education classes during the semester of the proposed study. Because not all twice-exceptional students were identified as such at the time of enrollment, the actual pool size was undetermined until the time of the teacher survey. Implemented by the county, the software only accounts for all information

reported by the school districts to the Ohio Department of Education. Snowball sampling will be used to fill any gaps in terms of participants. Qualitative research often calls for the researcher to continue to build and identify the sample throughout fieldwork as new opportunities arise through discussion with participants (Patton, 2015). Through the interview processes innate to qualitative research the researcher was able to identify names of potential participants due to the description of similar incidents and situations. This snowball sampling can prove to be useful as teachers collaborate in professional learning communities and may be able to identify colleagues that fit these same criteria and recommend them to the researcher. The final step was to select teachers purposefully to establish heterogeneity so that the researcher could offer a variety of participants and teaching situations to provide the opportunity to generalize among participants' experiences (Patton, 2015). The sample size included 10 participants. At this number data saturation was reached.

Procedures

The first step taken was to attain permission for the study from the Liberty University Institutional Review Board. This must be attained prior to any collection of data. Invitations were sent in person or email to each of the participating high school's district superintendent and building principal. This letter stated the purpose of the study and the expectations of the study's potential participants. After receiving permission from the superintendents and principals of each of the participating school districts and buildings, the researcher asked the principal to provide each eligible teacher with an invitation letter detailing the criterion, the purpose of the study and a request to take part. The letter stated that the participant must have at least one general education class with at least one twice-exceptional student enrolled. The teachers must also have a minimum of three years' experience in the classroom as this is one of the criteria the

state of Ohio uses to determine whether a student is being instructed by a highly qualified teacher. The letter also asked potential participants to pass the letter along to colleagues that might also be interested in taking part. Once the invitations were returned to the researcher, she organized them and selected participants to ensure heterogeneity in demographics and across districts. Before the initial interviews were undertaken, written consent forms were provided to all participants that had to be returned signed to the researcher prior to any interviews taking place. Once these were signed and returned, the interview process, the online focus group discussions, and the written responses to essay prompts began. The interviews took place in a location of the participant's choosing. The online focus group discussion took place utilizing the online Google platform, through which all participants have access in the county system. Written responses to essays were sent to the researcher through e-mail. All interviews, focus group discussions, and written responses were transcribed by the researcher and subsequently provided to the participant for review and correction.

The Researcher's Role

As the "human instrument" in this study, the researcher was responsible for all data collection and its analysis in this study. Piantanida and Garman (2009) discussed the need for the researcher to live the study from conception to thesis. The researcher's experiences and interpretation of truth colored by these experiences influenced how the researcher interprets the deeper meanings of this research. The researcher first became interested in the topic of twice-exceptionalism as an Advanced Placement teacher. More students were being identified as academically gifted, yet possessed a cognitive or behavioral learning disability that necessitated an Individualized Education Plan (IEP). As the human instrument, the researcher wished to uncover the themes common to teachers taking part in this study. Although the researcher was

well-versed in curriculum and instruction when it came to gifted students and learning

disabilities separately, the researcher was unaware of how to deal with it in the classroom when

put together. After some research on the characteristics of twice-exceptional students, the

researcher realized that she had probably served twice-exceptional students unknowingly while

teaching in a general education high school classroom. As an Advanced Placement teacher, the

researcher had the benefit of knowledge of gifted teaching strategies. Many general education

teachers do not.

At the time of this study, the researcher was employed as a curriculum coordinator by the

county educational service center in which the participant schools are located. The researcher is

responsible for creating professional development opportunities for teachers within several

schools. The researcher is not the evaluator for any of the participants taking part so that bias

can be avoided and confidentiality maintained. Although the teacher has worked on a

collaborative level with some of the participants on professional development, the researcher has

never been the supervisor of any of the participants.

<div align="center">**Data Collection**</div>

Individual interviews, online focus groups, and writing prompts were the three methods

used in this research study. Three different types of data collection were used to ensure the

ability to triangulate the data and establish credibility (Creswell, 2013).

Interviews

Moustakas' (1994) data collection methods most commonly included the long interview

for "evoking a comprehensive account of the person's experience of the phenomenon" (p. 114).

Upon transcription of the interviews, the researcher then organized the data so that equal value

was placed on each, the statements were then clustered into themes, and then these themes were

used to "develop the textural description of the experience" (Moustakas, 1994, p. 118). This textural description was then used to create a structural description of how the participants experienced the phenomenon based on the situation and context. All this combined created the overall essence of the phenomenon. In keeping with the nature of the phenomenology, the long interview was utilized in this research study.

Individual interviews were conducted with each of the study's participants. Teachers were interviewed at a place of their choosing and semi-structured questions were used to allow participants to elaborate upon their experiences (Creswell, 2013). Interviews were recorded by two different digital voice recorders and then later transcribed by the researcher. Two pilot interviews were conducted for refining the questions. Member checks were utilized to ensure accuracy of the transcribed responses. These interviews were in a place of the participant's choosing. Interview questions were changed and added to according to the participant's responses.

Standardized Open-Ended Interview Questions

1. When and why did you begin teaching? For how long?

2. What is your current teaching position? Grade? Subject?

3. When did you begin teaching twice-exceptional students?

4. How would you describe your experience of teaching twice-exceptional students?

5. What have you learned about teaching from twice-exceptional students?

6. What have you learned from your colleagues while teaching twice-exceptional students?

7. What training have you had in teaching twice-exceptional students?

8. What does it mean to be a teacher of twice-exceptional students?

9. How have your teaching practices evolved from the time you began teaching twice-exceptional students to now?

10. How do you incorporate the practice of reflection in your teaching?

11. Bandura (2012) discussed the practice of efficacy as being the ability of teachers to achieve desired outcomes through a variety of methods. How would you describe your sense of efficacy when it comes to the twice-exceptional students in your classroom?

12. How should people support the education of twice-exceptional students?

13. What else would you like to tell me about the education of twice-exceptional students?

The purpose of questions one through three was to establish that the participants fit the criteria for the study and for the researcher to gather demographic data to ensure the study may be replicated in the future. The purpose of questions four, five, six, eight, and 13 was to allow participants to elaborate on their experiences with twice-exceptional students (Moustakas, 1994). Studies have shown that when teachers are supported professionally in identification methods, instructional methods, and training in ensuring that students are being taken care of socially and emotionally, twice-exceptional students will thrive (Lee & Ritchotte, 2018). These open-ended questions provided opportunities for teachers to expound on the degree that professional development was provided on twice-exceptionality and whether this had an impact on their perceived success. Questions nine through 12 allowed teachers to reflect upon their practice and self-efficacy (Bandura, 2012).

Online Focus Groups

Although Moustakas concentrated on the interview, other data collections may be used in the phenomenological study such as poems, observations, and documents (Creswell, 2013). Moustakas (1994) believed that through the collection of various forms of expression the

researcher could gain further insight to the essence of the experience. An online focus group was

therefore created for the participants in the study. Identified strengths of the use of the focus

group includes the opportunity to hear from a variety of different perspectives, it can enhance

data quality by allowing participants to monitor themselves and one another, lack of discussion

on certain topics can be revealing, and the focus groups themselves are often reported to be

enjoyable to the participants (Patton, 2015). Focus group questions were guided by the

responses given during earlier interview questioning of participants and emerged as the study

and data collection and analysis evolved. Patton (2015) believed that focus groups can provide

information consistent about a phenomenon. The questions were semi-structured and allowed

for the interviewer to support information gathered from earlier interviews and elaborate through

questioning earlier phenomenon. One focus group was held utilizing a Google platform that

allowed for participants to take part in the group virtually from their differing locations. The

focus group discussions were recorded and then transcribed. One to two participants were asked

to participate from each school in the online focus group as this allowed for a greater dissection

of the overall study's participants and provided a sufficient focus group size (Patton, 2015). This

focus group was formed for providing elaborated information to earlier findings from the

interview questions.

Focus Group Open-Ended Questions

1. What challenges have you experienced when teaching twice-exceptional students?

2. Do you work with other general education teachers when planning activities for your
   classroom and twice-exceptional students?

3. What kinds of professional development have you been provided when instructing
   twice-exceptional students in your general education classrooms?

4. What differences exist, if any, in general education classrooms where you have instructed twice-exceptional students and where you have not?

Questions one through four were developed from the research findings that supported feelings by teachers that they were not supported when instructing twice-exceptional students (Callahan et al., 2015; Gari, Mylonos, & Portesova, 2015; Killoran et al., 2013).

Writing Prompt

Participants were asked to respond to three to four writing prompts for the purpose of capturing reflections and clarification of information obtained from the interviews and the online focus groups. A writing prompt was selected as an instrument of data collection due to its ability to allow teachers to practice self-reflection (Gallagher, 2013). Taken away from outside distractors, by writing thoughts down in a quiet place rather than worrying how they sound to others, the subject may delve more deeply into their teaching practices as they reach a purer state of consciousness (Husserl, 2012). Although these questions evolved dependent upon the data collected during the interviews and online focus groups, the questions were expected to follow the following general format.

Writing Prompt Questions

1. What challenges do you encounter while teaching twice-exceptional students in your classroom? Do you see challenges appearing in the future and if so, what are they?

2. Describe your feelings of self-efficacy when it comes to teaching in your classroom. Has this self-efficacy grown as you have instructed twice-exceptional students? Why or why not?

3. By whom and how do you feel supported in this endeavor of teaching twice-exceptional students in your general education classroom?

4. What steps do you feel you have to take to effectively grow as a teacher of twice-exceptional students in your general education classroom?

These few questions allowed for reflection and resulted in open-ended responses that aided in terms of qualitative inquiry (Patton, 2015). The act of writing and reflection in itself is an act of teacher efficacy and reflective practice and can guide participants to new ideas and ways of thinking (Janesick, 1998). Teacher efficacy and professional development have been identified as central to the success of students identified as twice-exceptional (Gavish, 2017; Tournaki & Samuels, 2016; Yadav, Das, Sharma &Tiwari, 2015; Zagona, Kurth, & Macfarland, 2017). Questions one and two focus on this idea of efficacy and the determination of whether inclusion of twice-exceptional students in this environment is democratic, fair, and an educationally sound decision in terms of providing a least restrictive environment (Skrtic, 1995; Tournaki & Samuels, 2016). Because studies show that teachers with adequate training exhibit more confidence in teaching twice-exceptional students, questions three and four allowed for teachers to reflect on their professional development, growth and feelings of adequacy in terms of building capacity for all types of learners in their general education classrooms (Gavish, 2015; Yadav, Das, Sharma, & Tiwari, 2015).

Data Analysis

The goal of this study's data analysis was to identify and establish the common themes that emerged from the interviews, online focus groups, and the writing prompts. All the interview and focus group transcriptions along with the responses to the writing prompts were entered into the Atlas.ti software program to aid in the identification of themes. All information was filed on a computer that is password protected.

The steps espoused by Moustakas (1994) were utilized for analyzing the data collected during this study. Moustakas believed that there were four core processes from which knowledge originated. The first core process is the Epoche. Greek in origin, Epoche means "to refrain from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving things" (p. 33). An open mind is needed to acquire the knowledge needed to analyze the data to derive the themes and essences of the participants' experiences. This idea of bracketing oneself away from the experience is essential to allowing researchers to set aside preconceived ideas due to their own experiences with the phenomenon and allow a fresher perspective (Creswell, 2013). It was important at this stage that the researcher bracketed herself through journaling to eliminate bias (Creswell, 2013).

The second core process identified by Moustakas (1994) was the Transcendental-Phenomenological Reduction. Moustakas described this as moving "beyond the everyday to the pure ego in which everything is perceived freshly, as if for the first time" (p. 34). Moustakas believed that a completed description must be provided that described all aspects of the experience as if the researcher had never been exposed to it.

The third core process described by Moustakas (1994) was the Imaginative Variation. In this step, the researcher developed a description of the experience he described as structural essences. These structural essences included the steps that lead up to the experience along with what came after it. This allowed the researcher to "arrive at a textural-structural synthesis of meanings and essences of the phenomenon or experience being investigated" (p. 36).

Finally, Moustakas (1994) described taking these three core processes and synthesizing them in such a way as to cut to the essential essence of the phenomenon. He stated, "the most significant understandings that I have come to I have not achieved from books or from others,

but initially, at least, from my own direct perceptions, observations, and intuitions" (p. 41). In other words, the transcendental phenomenology is grounded in the idea that the essence of truth is based upon the researcher's ability to get to the essentials of the phenomenon without allowing biases and outside influences to cloud what they see.

Transcendental phenomenological reduction was utilized to find the essences of the experiences (Moustakas, 1994). This was accomplished through the researcher immersing herself in the data through the transcription of interviews, online focus group discussions, and responses to the writing prompts. First, relevant phrases were listed, phrases were then combined into similar groups, and thirdly the researcher clustered the phrases to establish core themes (Yuksel & Yildirim, 2015). After the themes were established, the researcher created individual description using thick, rich writing. Finally, the researcher synthesized "the texture and structure into an expression (Yuksel & Yildirim, 2015). This helped when reviewing the transcripts in the Atlas software program for coding. Codes were then combined into meaningful themes (Creswell, 2013). After the essential themes were identified, the researcher made sense of the data within the larger theoretical framework and conveyed "what they have experienced and how they experienced it. The essence is the culminating aspect of a phenomenological study" (p. 79).

Trustworthiness

Credibility, dependability, transferability, and confirmability were important to the study for establishing trustworthiness (Creswell, 2013). Schwandt (2015) defined credibility as "providing assurances of the fit between respondents' views of their life ways and the inquirer's reconstruction and representation of the same" (p. 309). In other words, the researcher's findings must provide an accurate representation of the participants' experiences. Dependability assures

that the research "process was logical, traceable, and documented" (p. 309). Transferability allows readers of the study to make comparisons with similar studies while confirmability ensures that the researcher is simply not making up findings, but linking these findings to "assertions, findings, interpretations, and so on to the data themselves in readily discernible ways" (p. 309).

Credibility

Credibility was ensured through member checking, peer review, and triangulation of the data (Creswell, 2013). Study participants had the opportunity to review and correct their transcribed interviews and written responses from the focus groups and essay prompts. Fellow educators were asked to review data obtained and the triangulation of the data allowed the researcher to collect information from multiple sources.

Dependability and Confirmability

Dependability and confirmability were ensured due to external auditing and triangulation of the data (Creswell, 2013). Audits conducted by reviewers not involved in the study were utilized in order to ensure that the researcher was describing the experiences with fidelity. Triangulation of the data ensured that data and themes were emerging from multiple sources.

Transferability

Transferability will occur due to the researcher's use of rich, thick description of the study's participants, setting, data collection and analysis method (Creswell, 2013). This thick, rich description must be undertaken with seriousness to ensure the stage is set and data analysis can follow (Patton, 2015).

Ethical Considerations

Several ethical considerations were considered to ensure the safety of all participants in the study. Creswell (2013) makes several suggestions for ensuring the ethical integrity of the study. IRB approval was obtained before beginning the study. Approval was gained from the principals and superintendents of the participating sites. Participants were notified of the purpose of the study and were given pseudonyms along with the sites themselves. Participants were permitted to withdraw from the study at any time. All participants gave their informed consent and no disruption to day-to-day activities on the site took place. The researcher bracketed herself by journaling to reduce bias. All information obtained during the study was digitally stored and password-protected. Finally, the findings of the study will be shared with others in the hope of improving educational practice.

Summary

The methods of collecting and analyzing the data were detailed in Chapter Three. The study was conducted in ways to ensure that the findings derived from it are trustworthy and ethical. Moustakas' (1994) steps for reducing the data into themes and a final essence were undertaken by clustering phrases that were similar and identifying the overarching themes appearing in the data.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this research is to describe the experiences of general education high school teachers who have instructed twice-exceptional students in one northeastern Ohio county. The transcendental phenomenological approach is being used for this study as it allows the researcher to set aside biases and prejudgments through the Epoche process and examine the shared experiences of these teachers from their own unique, individual perspectives (Moustakas, 1994). Chapter Four presents the findings of this research. The data collection and data analysis methods, which took place over a three-month period, were previously described in Chapter Three. This chapter provides a detailed narrative about individual participants, using pseudonyms, and how the themes were developed. Additionally, Chapter Four identifies and describes the three themes uncovered by the research and answers the research questions used to guide this research. The three themes include:

1. Collegial Support

2. Student-Teacher Relationships

3. Ongoing Professional Growth

Participants

The following represents a narrative analysis of each of the 10 participants in this study. These narratives tell the stories of the overall experiences of general education teachers of twice-exceptional students in the high school students. Participants were identified as eligible for the study through having taught at least one twice-exceptional student during the school year and having a minimum of three years of teaching experience. Once identified, participants volunteered for the study after being contacted by the researcher through a letter sent by email.

Through interviews, open-ended essay questions, and participation in an online focus group, the researcher constructed narratives necessary to analyze their overall experiences. Moustakas (1994) detailed the importance of creating an overall portrait of the participant for effective qualitative analysis. Pseudonyms have been used and specific identifying characteristics have been removed to protect the anonymity of all involved in the study. Participants included 10 teachers from two high schools located in one county. Six participants were females and four participants were males. Table 1 includes the demographics of each participant.

Table 1

Participant Demographics

Pseudonym	Gender	Race	Age	Subject(s) Taught	Years' Experience
Charlotte	F	Caucasian	40-49	English	16
Evelyn	F	Caucasian	30-39	English	8
Henry	M	Caucasian	40-49	Social Studies	18
Jack	M	Caucasian	50-59	Science	30
Karen	F	Caucasian	40-49	English	17
Laurel	F	Caucasian	40-49	Social Studies	19
Margaret	F	Caucasian	50-59	English	33
Marshall	M	Caucasian	50-59	Math	25
Miles	M	Caucasian	40-49	Social Studies	6
Olivia	F	Caucasian	40-49	Science	21

Charlotte

A 16-year teaching veteran in the English department, Charlotte found her way into the teaching profession indirectly. After working for several years as a paralegal in a law firm following her college graduation, Charlotte realized that she was being led in a different direction. After volunteering at her church for Vacation Bible School and Sunday School teaching middle school students, she felt like she needed to become more involved with the community.

> I just felt like I needed to get more involved and the more I worked with the kids, the
> more I realized that this might be something for me. Because I liked being around these
> kids and liked seeing the lightbulb going off.

It was this experience that led Charlotte to realize that she could take her Bachelor's degree in English and do something beyond working in the law firm. Charlotte decided to go back to school and pursue her Master of Arts in teaching.

Charlotte has consistently taught English to 12th graders her entire career. Within that she has also instructed the English portions of several Career Tech programs including Fire Science, Health Technology, Engineering and Legal Studies. In conjunction with a local college, Charlotte also instructs College Credit Plus courses so that her students can earn college credit through her classes.

Charlotte did not become aware of twice-exceptional students until around her sixth year of teaching. She was teaching an English class for Engineering Technology students. This class consisted of many students with behavioral issues along with a wide variety of academic abilities. It was in this class that she remembers teaching her first student with Asperger's Syndrome. In regard to that first student and all those that followed, Charlotte stated "It is very

challenging because there is no one size fits all approach to these kids. You have to get to know them and learn what is best for them, and that takes time."

Evelyn

Evelyn has been an English teacher for grades nine through 11 at her present school for the last eight years. She was a substitute for three years prior to her current teaching assignment. Evelyn has always wanted to be a teacher, and this came through in her interview when she discussed how she was raised in a family of teachers and about how she would set up a school in her bedroom with her stuffed animals and made up worksheets. When asked about the term twice-exceptionalism at the beginning of her interview, she stated that

> To be honest, that has never crossed my path…that I am teaching a twice-exceptional student. I've known that I have had students in my classes that were gifted, but also had some sort of disability. But it was never really called that.

Evelyn stated that teaching these students can be challenging, yet rewarding. In her experience, she sees twice-exceptionalism manifesting itself in behavior problems. As time has gone on, she has learned to turn these behavioral issues into teachable moments. She revealed that one of her favorite techniques is to develop activities around students' interests when she stated,

> It is also really nice when I can hit upon something and I see them getting interested. You know a student who up until this point has hated school, and then I give them a compliment about how they are a good reader and then that is all they want to do.

Evelyn stated that she has learned a lot about teaching twice-exceptional students through her colleagues. She cited the fact that she works closely with Intervention Specialists as an important factor in understanding how these students work and the way she needs to work with

them. Evelyn believes the Interventional Specialists help with creating lessons that are most beneficial to students who learn differently.

Evelyn regularly reflects on her teaching and evaluates what went well and what needs to be improved from class to class and even during the lessons. She says that at the beginning of her teaching career, it made her nervous to have students challenging her, but over time, her relationships with students have evolved to the point where "…the kids need to see that you are human and that you don't know every little thing about what you teach." Evelyn believes these moments create stronger teacher-student relationships and improve the learning atmosphere in the classroom. It is important to her that more emphasis is placed on students who are twice-exceptional because "…everyone is capable of growth."

Henry

A great lover of world history, Henry marked his first year of teaching with the events of September 11, 2001. Originally wishing to be a professor of history, he realized as he walked into a class his junior year in college that he still had six years of college to meet that goal, so he switched to education. Henry was never one to say that he wanted to be a high school teacher and in fact, his teacher mom tried to discourage him. When first asked to take part in the study, Henry admitted he had to ask a colleague the meaning of twice-exceptionalism.

Although he has taught everything from Economics to American History, Henry's real passion is the World History class he currently teaches. He is a part of the Science, Technology, Engineering, and Math (STEM) community where he instructs freshmen and is part of a multi-disciplinary teaching team. He enjoys being part of a teaching team. "That has been fun. The first half of my career was spent on an island and I use to have five preps. And now each year we figure out more and more ways to incorporate."

Henry did not realize that he had twice-exceptional students in class until the first year he taught STEM. Since then, he has taught several students who present on the Autism spectrum. Henry believes that his successes instructing twice-exceptional students can be attributed to his team of teachers. "Where before, I had 200 kids and four preps, I didn't have anyone to communicate with." He feels that now he is better equipped to serve twice-exceptional students because of his involvement with the STEM team teaching model.

Jack

A veteran teacher of 30 years, Jack has taught Biology and Anatomy and Physiology in three different high schools in three different school districts. He has been instructing at his current school for the last nine years. In addition to Anatomy and Physiology, he has been assigned to two sections of Inclusion Biology where he works with an Instructional Aide to help in meeting the goals of students with IEPs. Both of Jack's parents were teachers and he initially did not intend to enter the teaching possession. But then, he found that he "…had some skills. It was kind of a natural progression. But 30 years later, I can't say it was bad. It has all been pretty good."

Before being contacted about participating in this study, Jack had never heard of the term twice-exceptional. He recognized that he has taught many of these students over the years, but has never put a label on them. In fact, Jack believed that being interviewed on twice-exceptionalism prompted him to consider many of his students in a different light when he stated,

> This kind of opened up a new perspective on how I started thinking about the kids at the
> end of the year this year. I've had plenty of kids I could say over the years have been
> twice-exceptional because looking back on them they had talents and things that I had no

idea. You run into them years later and you know they are doing really well in different field that you never would have guessed having them in the Biology classroom. But when it comes right down to it, I think I have recognized that my whole career. I don't try to just teach Biology; just teach Anatomy. I try to teach skills.

Jack finds the experience of teaching twice-exceptional students frustrating because of the lack of training in Special Education and inclusion classrooms. Upon receiving his inclusion teaching assignments two years ago, he felt overwhelmed and underprepared. "As a veteran teacher, I wasn't sure how I was going to handle it." He credits the fact that he has worked in a Teacher Based Team during the current school year where they have 40 minutes at the end of each day to reflect, talk about students, lesson plans, and instructional strategies.

Jack views large class sizes as a barrier to teaching effectively teaching twice-exceptional students, however. He is a proponent of providing choice and different methods for students to demonstrate their attained knowledge, and this can be difficult with class sizes of 30 plus. In addition, Jack advocates for strong teacher, student, and family relationships. "At the end of the year, you are like, do I know their name? Because things happen so fast now, you have all of these tests coming up, you have all of these interruptions. Families make better schools."

Karen

Karen, a teacher for 17 years, has taught a gamut of English courses in the 10th through 12th grades. She entered the teaching profession after deciding to leave the business world about which she states, "I didn't really fit in an office environment doing the same thing every day." She began teaching Sunday School while at her previous job and decided that her true calling was teaching. She made the leap and earned her Master of Arts in teaching and was subsequently licensed so that she could teach at the high school level. After teaching everything

from credit recovery classes to Advanced Placement and International Baccalaureate programs, Karen demonstrates a great deal of knowledge on twice-exceptionalism.

Karen first became aware of twice-exceptional students in her third or fourth year of teaching while working with a Special Education teacher who supported students with IEPs in her mainstreamed classroom. Karen believes that "…it is a positive experience, but it also can be a really challenging experience." She relies on working with a team of teachers to identify strengths and weaknesses in her teaching strategies and places importance on communication with parents as a factor in her success with teaching twice-exceptional students. Karen counts on these relationships with colleagues and parents because "…by the time they get to me in tenth and eleventh grade, they've had a lot of educational experiences and those can be positive or negative and that influences how they perceive school as well." Karen acknowledged that she has had zero formal training on twice-exceptionalism and that it is her teaching experiences and colleagues that have helped her get to her level of comfort with teaching twice-exceptional students today. Her belief that twice-exceptional students need to be challenged and are capable of learning permeated throughout her interview. Karen stated that experience has made her a stronger teacher.

> I think the biggest thing that has changed are my approaches to teaching and learning. As a new teacher, I was anxious, I wanted to do everything perfectly. If something didn't go right, it bothered emotionally. I got upset by it; frustrated by it.

Now, she believes her practice of reflection to ensure that students are learning is better than her earlier teaching practices. She regularly looks back upon her lessons and determines whether she is meeting the goals of individual students. "I don't think there is one catch-all for every twice-

exceptional or any average student. It really depends on being able to meet their needs the best we can."

Laurel

Laurel entered the teaching profession directly after her graduation from college with a Bachelor of Science degree in Comprehensive Social Studies Education. During her 19 years of teaching, she has gone on to earn two Masters' degrees in education and has taught everything from ninth grade American History and World History classes to Advanced Placement and International Baccalaureate courses. Laurel states that she loves being around her students and fell in love with teaching older students because she "…love(s) that transition between them being kids and becoming adults and we can help them." She believes that it must be "extraordinarily challenging to be gifted academically and then to also have some sort of disability that really makes it tough to express that in a classroom setting."

Out of all of the study participants, Laurel presented as being the most confident in her knowledge of twice-exceptionalism. She was able to provide specific examples of students throughout her teaching career who exhibited the characteristics of twice-exceptionalism. Not only did she discuss students who presented on the more commonly recognized spectrum of Autism, but also two specific students who exhibited the symptoms of dysgraphia (the inability to write legibly). Similar to other participants, Laurel recognized the importance of working with colleagues to hone teaching practices and discuss the needs of specific, shared students. Laurel attributes her growth as a teacher to having had the experience of working with twice-exceptional students. Specifically, Laurel stated, "I think it made it so I could be more flexible. That this should be a place for kids; where they felt comfortable because, especially twice-exceptional kids, if they feel comfortable, they will come to talk to you." She finds that this

relationship between student and teacher along with a building of trust is integral to the success of both teacher and student. Although she has not received any formal instruction on twice-exceptionalism, she believes that student choice is integral to their academic and social success in school. Her strong belief in providing an inclusive environment for all students was revealed when she stated, "I definitely feel like as long as the student with a disability does not infringe upon another students' learning, then we really need to serve them at the highest, most challenging classroom possible."

Margaret

A veteran teacher of 33 years, Margaret grew up knowing that she wanted to be a teacher. Never wavering, she stated that "I just can't see myself doing anything else." She has taught English classes to sophomores through seniors and for the past several years has concentrated on Honors English classes for sophomores and Advanced Placement Language and Composition to eleventh grade students. Underneath Margaret's sarcasm and biting sense of humor, however, is a teacher who deeply cares about what is best for her students.

When asked about teaching twice-exceptional students, she admitted that she was not familiar with the term. After understanding the meaning of twice-exceptionalism, she stated that she noticed these students coming to the forefront of her classes a couple of years ago. She struggles, however, with providing help to these gifted students who often struggle themselves. Margaret stated that "Sometimes it is tough to navigate, especially in classes of 30 plus students. But it is what they need, and we try to provide that for them."

Margaret believes that staying in contact with parents and colleagues who share the same students is crucial to their success. Although she stated that they have probably had some sort of training on twice-exceptionalism, she is unable to pinpoint exactly what it entailed and when it

occurred. Twice-exceptional or not, Margaret believes that the student, parents, teachers, and counselor should have an ongoing and regular dialogue to help those students who are twice-exceptional. Margaret revealed this commitment to education when she stated "I keep getting asked why I keep going when I don't really have to, but like I said   at the beginning, I don't know what else I would do. And at this point I still like doing it day-to-day." And again, with the sense of humor and sarcasm pervasive throughout the interview, she stated, "Especially in the summer, it is really nice. I enjoy it very much."

Marshall

Marshall is a teacher of 25 years with a Bachelor of Science degree in Aviation Engineering and a Master of Arts degree in teaching. In the ninth grade, Marshall had an assignment to interview a person about their occupation and he selected his Science teacher, Mr. Wilson. Although Marshall went on to be a part of the Reserve Officer Training Corps (ROTC) in college and consequently spent four and a half years as a commissioned officer in the Navy, he never forgot the love of teaching Mr. Wilson had exuded in that interview and the characteristics of slight introversion, preciseness, and accuracy of speaking that they shared. Upon leaving the Navy, he decided to enter the teacher licensure program at a local college and earned his credentials to teach mathematics at the secondary level.

After teaching for three years at a smaller, rural high school, Marshall applied for and was hired by his current school after he attended a workshop sponsored by their math teachers. Strong relationships among faculty members is clearly an important part of his life as a teacher and is, in fact, the reason he came to his current school. Marshall stated that when he heard the teachers talking to him and others, he believed "…if I could get on this teaching team with these guys, in this building, I would be amongst a monster group of luminaries." It is clear that he

loves his life as a teacher and states "Unless I am on my deathbed or my kidneys are failing. I will be here."

Although Marshall asked for clarification during the interview on the meaning of twice-exceptionalism, he clearly possessed knowledge of those students who fit within that label. Marshall stated that he usually has two to three students per year who are on IEPs and identified as gifted. He recognizes that there is usually something socially different about twice-exceptional students, but believes that "…with no exception here, the students do not want to be singled out or held differently from other students." Student relationships are so important to him that he never wants to single out students due to their disability. Instead, he discreetly has conversations with students when needed so that the requirements of their IEPs can be met. He followed this up by stating, "I don't see any use of a handicap or disability as a crutch." Marshall believes that one of the most important elements to teaching twice-exceptional students is to always make himself available for individualized tutoring, even tutoring on Saturdays at the library if needed. Unlike other teachers who are just five years away from retiring, Marshall expressed,

> I want to keep this remaining five years as open as possible. Now is the time to strike the iron while it is still hot. Because I look at all of those wonderful teachers I mentioned. Where are they all now? They are all retired. Away from school. I am here. Now is the time to make a difference.

Miles

In his forties, Miles has been teaching six years. Although he did initially go to college for education, he changed his major when he was a junior, thinking that he wanted to be a college professor rather than a secondary education teacher. Things did not go as he planned,

however, and Miles ended up graduating with a general degree in Social Studies. After 10 years of working at the same company, he went to work one day and was told he no longer had a job. Miles then decided he would go back to school and finish his teaching degree, after which he was hired as a Social Studies teacher, instructing History and Government and helping to coach football.

At the time of Miles' initial interview, he admitted he was completely unfamiliar with the term twice exceptional. After he understood the term in the context of this research, Miles stated, "I picture a tortured soul that has the intellectual ability to do something, but there may some sort of roadblock in their way that trips up their brain in getting their goal."

Miles did not receive any specific training on twice-exceptionalism in college or after, and he stated that he only ever remembers taking two specific courses in the arena of Special Education. But he does believe that providing a variety of ways for students to learn and come to their own conclusions is important. Miles does not believe that there is just one strategy to reach all students. He provides learning opportunities for students so that they all have an opportunity to excel. Miles does not recall having specific conversations with colleague about teaching twice-exceptional students, but he does state that "…most of what I have learned as a newer teacher has come from my colleagues."

When asked about efficacy, Miles stated

I am a fairly firm believer that anything I offer one student I am going to offer all students. I want to be cognizant of keeping it fair between all, but also realize that there are some that need a different approach, method, timing.

As a former instructor in a wilderness and outdoor education program, Miles sees a need for more experiential educational methodologies and strategies. Miles revealed his beliefs in

education based on experiences when he stated, "I believe our juniors could learn more from going to Washington D.C. for two weeks than 186 days in school. And that is not necessarily a possibility. But experience definitely helps."

Not afraid of expressing his opinions about today's world of education, Miles believes that educators today do not demand excellence. "I think we demand you to pass a state test. Or we demand you to get a grade. And that doesn't necessarily mean excellence." Miles believes that the role of an educator is to not just enable students to meet their goals, but to surpass them. His favorite quote by Vince Lombardi embodies this idea when he stated at the conclusion of his interview, "Gentlemen, we will chase perfection, and we will chase it relentlessly, knowing all the while we can never attain it. But along the way, we shall catch excellence."

Olivia

Olivia became a full-time teacher after coming out of college not really knowing for sure what she wanted to do in the future. She enjoyed a stint as a paid tutor in college, and as the daughter of teachers who told her to give it a try, Olivia started her teaching career as a substitute. Substitute teaching gave Olivia the opportunity to explore several different grade levels where she discovered she had a love for teaching high school students. Olivia decided to go back to school to earn her Master of Arts degree in education and is now a veteran with 21 years' experience teaching Integrated Science and Chemistry.

Olivia was upfront with the fact that she had never heard the term twice-exceptionalism before receiving her invitation to participate in the study. Once she understood the meaning of the term, she recognized that she first became aware of students fitting into this category approximately nine years ago. Olivia remembers one particular student who had multiple issues on his IEP, including dysgraphia. She worked with him to find ways that he could present his

assignments using methods other than writing. Olivia believes teaching twice-exceptional students is "rewarding and challenging" and varies upon individual students' needs. She spoke extensively about the need to be flexible and giving students "a lot of different options so that they can show what they know."

Olivia does not recall having received any specific training on twice-exceptionalism, but believes that teaching these students "…is a huge privilege. I think you learn a lot from those kinds of kids that are just really outside the box." She recognizes that her teaching practices have evolved over time and she works to incorporate student feedback into her lessons. In her early years of teaching, Olivia had students completing a lot of worksheets and now she has them working in groups and at stations. She has worked to incorporate different methods for students who struggle, such as making videos for them and allowing students to be more creative in their presentations of their work. Olivia maintains it is important that everyone remains open-minded and believes differentiation is key to all students' success.

Results

Through the analysis of in-depth, individual interviews, essay questions answered by participants, and the dialogue from an online focus group, the results and themes of this study emerged. The participants in this study linked themselves through many of the same observations and experiences with twice-exceptional students throughout the three different data types for collection. This triangulation of the data allows for more reliability and helps to ensure validity within the theme development (Creswell, 2017).

The researcher used Moustakas' (1994) qualitative analysis methodology whereby she bracketed herself from her own personal experiences of teaching twice-exceptional students through journaling after each instance of data collection. The researcher transcribed all

interviews and focus group responses and then uploaded all documents, including the responses to the essay questions, into the Atlas.ti8 software.

The Atlas.ti8 software allowed the researcher to generate a list of codes appearing within the documents after which the researcher could identify the codes central to the research on the shared experiences of teachers of twice-exceptional students. The researcher connected the codes in their relevance to one another so that the researcher could then identify the themes related to the four research questions. The themes that emerged after this synthesis of materials and consequent phenomenological reduction include: Collegial Support, Student-Teacher Relationships, and Ongoing Professional Growth.

Table 2

Identified Themes and Related Codes

THEMES	RELATED CODES
Theme 1: Collegial Support	- Community - Cross-Curricular - Collaborating - Communication - Discuss - Reflect - Teaming - Inclusion - Teacher Based Teams - Learning - Professional Learning Communities - Family - Conversation - Listening - Planning - Coaching - Role Models - Enthusiasm - Specialists - Support

- Classroom Visits
- Inclusive Classrooms
- Special Education
- IEP Discussion

Theme 2: Student-Teacher Relationships

- Sense of Humor
- Relate
- Greet
- Noting Interests
- Activity Attendance
- Differences
- Knowing
- One-on-One
- Differentiation
- Choice
- Patience
- Routines
- Self-Esteem
- Persistent
- Cheerleader
- Attention
- Emotional Needs
- Goals
- Comfortable
- Flexible
- Understanding
- Sense Perception
- Unpredictable
- Openness

Theme 3: Ongoing Professional Growth

- Not Discussed
- Lack of Training
- Diversity
- Professional Development
- Challenging
- Time
- Difficult
- Access
- Case Management
- Counseling
- Class Size
- Reflection
- Encouragement
- Learn from Experience

- Methodology
- Journaling
- Authentic Change
- Self-Assessment
- Trying
- Rubrics
- Goals
- Assessment
- Thrive
- Strengths
- Weaknesses
- Equity
- Fairness
- Excellence
- Learning
- Change
- Funding
- Social Needs
- Psychological Needs
- Academic Needs
- Uncomfortable
- Knowledge
- Workshops
- Timeliness

Theme Development

Theme 1: Collegial Support.

The first identified theme was Collegial Support. Karen and Laurel stated that they had knowledge of twice-exceptionalism through their own reading and research on the topic. The rest of the participants admitted that they did not have specific knowledge of the term twice-exceptionalism or specific training on working with twice-exceptional students. It became evident that all of the participants relied on their colleagues for advice and support when working to find the strongest instructional strategies. In fact, all 10 participants stated that to their knowledge, they had never been provided specific training on twice-exceptionalism by their

school or college education program. Although some of the collegial support comes formally through school-structured Professional Learning Communities (PLCs) and interdisciplinary teaching teams, many times participants identified mentors they could trust to help them create valuable learning environments for all students. The topic of twice-exceptionalism was not one that ever came up formally in any team meetings or professional development opportunities. Participants did, however, place great emphasis on the fact that they frequently discuss individual students' needs, and many times that includes twice-exceptional students.

Critical to Marshall's formation as a new teacher to his current district was a group of mentors he found within the Math Department. He found their dedication and passion for their work to be inspiring and this pushes him everyday to be the best teacher he can be for his students. Marshall demonstrated his respect for these characteristics in his fellow teachers when he stated,

> They took it very seriously. Very ardent about the matter, the material they were instructing. I am kind of automatically that way. Everyday I try to be in front of the class, emotive about things. Very demonstrative. And I try to do the same thing.

Miles reiterated this idea in his interview where he stated that as a new teacher, most of what he has learned has come from his colleagues. He likes to engage in conversations with his colleagues to learn more about students and why they may be behaving the way they do. Although Miles believes that many teachers say this, he says that "I have learned more from my colleagues than any college professor in my classrooms in college."

Jack also looks to the expertise of his colleagues on the Teacher-Based Teams (TBTs) for advice when it comes to teaching twice-exceptional students. Sometimes, however, the school

structures make it difficult to make these collegial relationships even stronger. This was evidence when Jack stated,

> We've got 40 minutes at the end of each day where we've been getting together and talking about things. Unfortunately, the person I believe who is best equipped to deal with those kids and have the best ideas and has really worked with them was moved down to the middle school. And kind of left a void. I think I could have learned a lot from her on that, but we could have definitely talked about these kids, about where they thrived.

Evelyn's school has structured a program at the high school where general education teachers team with Intervention Specialists to jointly instruct students. Evelyn believed this is from where some of her most valuable instructional strategies have emerged. She stated that the Intervention Specialists "have taught me so much about the way these kids work, the way I need to work with them." Evelyn acknowledged that she does not have a lot of knowledge about the world of Special Education and has learned a great deal about "how to get a kid to learn something in a different way that would be more beneficial for them." Margaret also acknowledged that she has learned the most from the Intervention Specialists who work with her twice-exceptional students. In regard to her Intervention Specialist colleagues she stated, "They are really the ones I go to find out what seems to work for them and how we can get them to grow in both classes. So, I really learn from those teachers who are specialized in that." Margaret also said that a key to helping improve instruction for twice-exceptional students is to work with her fellow English teachers on differentiating instruction. Emphasis has been placed on not only meeting students where they are, but to challenge those students that are gifted. That can be difficult when that student also wears the label of twice exceptional.

Out of the ten participants, Karen and Laurel demonstrated the greatest knowledge about twice-exceptionalism, yet they also discussed the importance of collegiality to their teaching practice. Karen believed that a team approach of working with the Intervention Specialists and Case Managers is crucial to the education of twice-exceptional students. Case Managers meet each year with families when reviewing students' IEPs, often developing an ongoing relationship, so Karen stated "I've learned that over the years Case Managers know more than any of the teachers in the classroom when it comes to those students because they stay with them for more than one year." Laurel identified the fact that she is part of a strong teaching team as being critical to supporting each other and the needs of twice-exceptional students. Laurel's collaborative teaching team have roundtable discussions on their collective students each month where they discuss students' motivations, stresses, and struggles in class. "We have one twice-exceptional student this year and we monitor his progress, needs, and successes as well as communicate with his parents so we are a team making sure his education works for him." This sense of team collegiality was reiterated by Margaret. She emphasized that not only should parents, counselors and teachers be involved, but the students themselves. When asked what makes a difference in the education of twice-exceptional students, she stated,

> Just making sure that everyone is on the same page. And that the student is involved, too.
> A lot of times we have meetings where the student is not there, which doesn't make any
> sense. They need to be listening and they need to have their input, too."

Henry also pointed to being a part of a teaching team as an important factor in how he provides instruction to twice-exceptional students. He believes that an important part of his success is due to a technique he learned from one of his teaching partners. Henry described their now joint practice of sitting down with each student with an IEP or 504 at the beginning of the

year and discussing students' needed accommodations. The teachers make the student a part of

the team by asking questions like, "It says you need small group. What do you mean by small

group? What do you feel comfortable with?" Henry and his teaching team bounce ideas off not

just one another, but the student to form their instructional plan.

Although all participants agreed that collegial support is an important factor in their

experiences of teaching twice-exceptional students, Olivia was quick to point out that one can

often learn what not to do from colleagues. Olivia revealed the importance of this when she

stated,

> Just like that last student I spoke of…because he would talk about his other classes where
>
> it was very rigid. He had to do his work in a certain way and for him that almost put him
>
> in a rebellious state where he would shut down and not want to learn. I guess that is
>
> really a lesson I was taught; that you really have to be flexible, give them a lot of
>
> different options so that they can show what they know.

While all teachers stated that they had not received specific professional development or

instruction in college on twice-exceptionalism, the theme of learning from and relying upon

colleagues was a common thread throughout the interviews, focus group, and written responses.

In her written responses, Laurel pointed out that often it is an either/or situation; teachers are

provided a vague Written Education Plan (WEP) for Gifted students or the IEP or 504 presenting

accommodations for a learning disability. It is never for both. This misunderstanding of twice-

exceptional students and their needs have therefore evolved into a situation where Laurel stated,

> I feel as a group of colleagues, especially with the IB and AP teachers at our school, we
>
> support each other and feel comfortable talking about strategies that work with the
>
> different students. Conversations frequently happen informally, or by one of us seeking

others out to see how a twice-exceptional student acts in a class, what seems to motivate him, what struggles and successes he had, and what really make him stressed."

Theme 2: Student-Teacher Relationships.

The second theme identified was Student-Teacher Relationships. Prevalent throughout the interviews, focus groups, and written responses was the common ideology that a strong student-teacher relationship is crucial to a successful education for twice-exceptional students. One-on-one time, listening to students' needs, and letting students know that they are cared for were beliefs discussed by all ten of the participants.

Charlotte was especially adept at describing the importance of creating strong teacher relationships. She stated,

It is very challenging because there is no one size fits all approach to these kids. You have to get to know them and learn what is best for them. And that takes time. Because you know that they are gifted or they are struggling and they don't want to have that showcased. You have to take all of that into consideration. But I really prefer to get to know that kid and then figure out what works best for them.

Charlotte acknowledged that it takes a lot of juggling to ensure that every student is receiving what they need. She described a student from a few years ago who is Autistic. He never spoke to her or even made eye contact. It took awhile for her to realize that this was his way of coping with his classwork and not believe that he was ambivalent about her instruction. Another student reacted badly when he walked into the classroom and she had her umbrella open. Charlotte emphasized that teachers must constantly be aware of every student's needs when she stated,

Every single kid has different needs depending on what they are dealing with. I try to hone in on that particular kid and try to remember who all has what. I think it takes a lot

to get to know that kid. And if the parents are nice enough to give me a heads up on that student as well. But I don't always get that. I get the 504, I get the IEP. So, every single kid is different, making it challenging.

Although Margaret believes that her sense of humor and sarcasm is a reason that she has strong relationships with her students, she was quick to point out that sometimes it is the little things like standing outside her door and greeting each student as they enter her room that helps her create the trust needed to help twice-exceptional students. Margaret revealed the importance of this openness when she stated,

Even students who aren't mine like stopping and talking to me at the door. It is really about trying to relate to them. Not necessarily getting on their level. You know I will hear them talking sports in class and maybe I will join in. I just think having kids seeing that you are interested in what they are doing is important. I try to get to a lot of activities. They like seeing their teachers and administrators at their events. So, I think it is just trying to relate to them and showing them that I care.

Marshall viewed the fact that he shows great enthusiasm and knowledge of his subject as being crucial to forming strong student-teacher relationships. He does not just show enthusiasm in his classroom, but how he even walks quickly through the hallways. For example, Marshall said, "Out in the hallway, when I walk down the hall I am moving; just striding. I'm in a hurry to get copies because I want to get back there and be with them." He makes himself available for one-on-one tutoring or in small groups. Marshall is a strong believer in making himself available to all students if they need help.

Knowing students well enough to make decisions for them that will enhance their learning is also crucial to the teacher-student relationship. Having instructed a student with

dysgraphia for example, Laurel understood that allowing that student to type everything took away the fear that the student's responses would not be able to be read and counted for the knowledge and skills they contained. Understanding that another twice-exceptional student does not get along well with all students and pairing him with a fellow student he works well with goes a long way in establishing a trusting, strong relationship. This needed deeper understanding of students is supported by Karen. She understands that as eleventh grade students, they are coming to her with a wide variety of educational experiences. For example, Karen said,

> I think the biggest challenge is sometimes, depending on the student, they are
>
> unpredictable. Sometimes they can come into class extremely focused and ready to learn.
>
> Sometimes, whatever they are dealing with influences their ability to learn. And it
>
> influences their ability to be able to accomplish the task, the goal, or lessons of the day
>
> And I think that is what really stands out to me.

Like many of her fellow study participants, Karen views the input of the parent as being crucial to the success of the student-teacher relationship. She believes that when the parents and teachers are on the same side, understanding can be gained to strengthen the student-teacher relationship. Karen emphasized this when she stated,

> I think it is really important to understand the child's background because by the time
>
> they get to me in the tenth or eleventh grade, they have had a lot of educational
>
> experiences and those can be positive or negative and that influences how they perceive
>
> school as well. So, if you can get that background information, you have established a
>
> really good foundation with the student.

This idea that the students should be a part of academic planning and progress decision was shared by Margaret, Henry, and Evelyn and is believed by them to create a stronger student-

teacher bond. Henry's practice of individual conferencing and Margaret's belief that students should be a part of meetings held with counselors, parents, and teachers point to students being a vital key to the relationship of all parties in their education. Evelyn's beliefs on classroom management also point to the importance of the student-teacher relationship when she stated,

> I've learned that you have to be flexible. And patient. Very, very patient. And also that their behaviors have to do less with me; it is not me personally when a kid is acting out in class. And that is something over time that I have had to realize. You know, take a step back and know that it is not because they hate this class, or that they hate me. It is just because they are having a bad day. And you know not to react in a way that would totally cut off the relationship that you have already built.

Theme 3: Ongoing Professional Growth.

The third theme identified was Ongoing Professional Growth. Although all but two of the participants did not have knowledge of the meaning of the term twice-exceptionalism, all of the participants expressed an interest in learning more about its meaning. In fact, Olivia had completed reading on twice-exceptionalism before her interview. Not only did teachers express an interest in its meaning, but also how they could better reach these students through PLCs, TBTs, and professional development.

Although enacted in different forms, the practice of reflection was a commonality amongst participants in terms of their own individual growth. Charlotte, Henry, Karen, Laurel, and Margaret all discussed keeping some type of journal where they noted the successes and failures of lessons, what they had learned from these, and how they would make changes to better reach and instruct students in the future.

Laurel discussed how her own reflective practices have led her to individualize and differentiate for her students. This emphasis on differentiation was evident when she stated,

I always like to reflect both during and after a lesson. You know where you are just personally reflecting? You can read kids' body language. You can read what they say. You can feel the tone in a room. I think on a daily basis taking the temperature of the classroom is really, really important. Are they overwhelmed now? Do they need more? Are they bored? So obviously taking the temperature, but obviously at the end of each assignment and each nine weeks when I give the students back their rubrics.

Henry and Margaret both explained how they keep written notes so that they know what they need to differently in the future to improve their instruction. Henry presented the Google document he used so that he could not only remember, but get right to work at improvements. As he shared the form, Henry stated,

Whenever I teach anything. Right now I have a form open. I keep a document in Google docs of what I want to change. And so, if you would look for next year, I am already planning on redoing our form for our community. But after every lesson I am thinking what could I have changed? What could I have added? How did the kids do? Then I go back to the tests. What didn't they do?

Margaret takes a similar approach to Henry where she asks herself a series of questions and takes notes for the following lessons. Margaret shared,

I'd like to say I sit down every day and reflect on what went well and what didn't but that doesn't happen because we don't have that much time and energy. But usually with units at the end, and this is where I really do talk to my fellow teachers. You know, what went well for you? How did your students do on this? Or how can we make it better? And

you know, we do this in the summer as well, when we actually have some time to sit back

and look.

Karen also models a method of taking notes and taking them to improve instructional strategies

with students. "That was actually what my mentor stressed when I was first learning to be a

teacher. So, after not every class, unless something happened that class, but after each lesson, I

do take the time to think about what worked, what didn't work and why."

Charlotte not only has committed herself to keeping a running journal of what works and

does not work, but also often takes time to research ways to improve. For example, Charlotte

said, "If something went really well, I might take a few moments that evening and research it."

Not only does Charlotte personally develop herself, but has also taken part in a great deal of

professional development on how to reach students living in poverty and forming relationships

with students that are often misunderstood. For example, Charlotte said,

> I learned in a class I took about five years ago, that I am a public school teacher. I am not
>
> a therapist. I am not a counselor. My teacher put out a basket for all of us and told us to
>
> write down whatever is on your mind. Crumple it all up and throw it in the basket. That
>
> way, it is out of your stuff and you can focus on why you are here. Twice exceptional
>
> students need outlets just like everyone else.

Several participants alluded to how experience itself and learning on the job led to their

most important professional growth. Miles stated that, "You can have the best plans but when

you go to implement them and they don't work, they aren't the best plans. Had I not had help

from my fellow teachers, I don't think I would have reached the potential or helped as many

people or solved as many issues." Evelyn believes that as she gains experience, her professional

growth has evolved. This evidence of professional growth was evident when Evelyn stated,

I remember when I first started, I didn't like when a kid challenged me. It made me nervous when they questioned me about anything. Especially when it was about the content and it was something I didn't know the answer to. But over time, I have learned that a lot of times these kids know more about things in certain regards that I do, and a lot of times, when they are asking a question, it is not because they want to be jerks, it is because they really want to know. And I think the kids need to see that you are human and that you don't know every little thing about what you teach. And, so have that open discussion. Let's look that up. Let's find that out.

The participants in the study expressed ways throughout their careers on how they continued to grow professionally. Sometimes it was about learning instructional strategies from colleagues, reflection on a lesson, or how to form stronger relationships with their students so that the participants can reach their students academically.

Research Question Responses

Through providing a rich narrative analysis in response to the phenomenon of instructing twice-exceptional students, the research questions provided a structure and emergent themes that created a picture of teachers' experiences.

Research Question 1 response.

How do general education high school teachers instructing twice-exceptional students describe their experiences meeting the academic needs of twice-exceptional students in general education classrooms?

When describing their experiences instructing twice-exceptional students, participants focused on their own self-efficacy and professional growth. There were many frustrations expressed by teachers because they did not know the term or felt that they had received adequate

training, but at the same time, it was described as a privilege and a process that is an important part of growing as a teacher.

Laurel stated, "I think it helps you grow. If you have cookie cutter kids, they don't challenge you, so you as a teacher do not have to grow very much. I've learned to be more flexible and less rigid." Karen viewed the experience of teaching twice-exceptional students as one of constantly striving to meet the goals of all her students. She believed that instructing twice-exceptional student is a role that does not necessarily need to be differentiated from her teaching of other groups of students. Karen stated that is more about "how I treat the students and make sure they are integrated into my classroom." Olivia stated that the experience of twice-exceptional students is "a huge privilege. I think you learn a lot from those kinds of kids that are just really outside the box."

Marshall likened the experience of teaching twice-exceptional students to being a basketball coach. "Say, for instance, I'm only five foot six. Will I ever be able to dunk the basketball? No…but I guess I can try. Try to jump, jump, jump, develop my leg muscles and get closer." Marshall explained that he often feels like a coach. Sometimes the goals seem impossible, but it is his job to get students as close to their goals as possible. Charlotte similarly discussed goals when asked about teaching twice-exceptional students. She stated,

> Because I want those kids to reach their goals. And because I know, when I get them, they have had all kinds of experiences, teachers, classes, life experiences. But I always tell them that you guys are all different and come from different backgrounds. But you are here with the same goal. And that is to learn.

In response to the question, participants frequently responded with answers revolving around equality of education for all. Henry stated that "It is to be a teacher for everybody. They

want to be pushed, but you need to know how to push them. But that is with every kid. Every

kid wants to be pushed to a certain extent and every kid you have to approach differently."

Evelyn responded with "A lot of time, I would say it can be challenging, but rewarding."

Jack finds the experience of teaching twice-exceptional students as frustrating at times,

but also allows for the idea that he needs to explore the experience and reflect on it more. Jack

stated,

> Wow. I don't know yet. Because I've just started looking at what twice exceptional
>
> means. I think it comes with a lot of responsibility from what I can see. You are charged
>
> with finding in a kid what makes him tick. Where their gifts are.

Challenging, rewarding, a privilege, and a responsibility commonly were used to describe

the experience of instructing twice-exceptional students in the general education classroom.

Research Question 2 response.

What needs are to be addressed by general education high school teachers instructing

twice-exceptional students to ensure the improvement of instruction for twice-exceptional

learners?

In most of the interviews, focus group discussion, and written responses, teachers

responded to the needs of twice-exceptional students as being similar to other groups of students.

They discussed the need to collaborate with their colleagues, to reflect on their teaching

practices, and to form strong relationships with students and their families to ensure that

instructional strategies and students' educational experiences continued to improve.

Margaret stated "I think I just want to make sure that they get to the same place as

everyone else. They may have to go a different route, or they may need more help." Evelyn

similarly said it is important to her to see when a student is not getting what she is teaching "and in the moment, tailoring it for that particular student."

Reflection also emerged as a need for continually evolving instructional strategies for twice-exceptional students. Like several of the other participants, Jack worked to collaborate with colleagues in their TBTs and ask questions of teachers who had previously instructed them. Examples of these questions included, "What were their patterns? What were they not doing? Anything more you can give me. We reflected on every single thing we did this year, which was kind of cool."

A teacher who was compassionate, understanding, and a strong relationship builder also emerged as a key need to successfully instructing twice-exceptional students. Margaret expressed the need to show they care through attending extracurricular activities and Charlotte emphasized the need to create an atmosphere of openness and equality, not just for twice-exceptional students, but for all students in their classrooms.

Research Question 3 response.

How do the perceived experiences of general education high school teachers instructing twice-exceptional students affect their self-efficacy when instructing twice-exceptional students?

Across the board, study participants demonstrated a sense of efficacy through their reflective practices, formed relationships with students and their families, and a need to continually improve instruction that could reach all students, not just those who are twice exceptional.

Marshall viewed his self-efficacy as not just whether they are passing the class but creating a class where they could meet their goals. For example, he stated, "I don't want them turned off, turned away. I don't want anyone to leave the year, end the year, disliking math."

Marshall believes the practice of efficacy is reflected in his enthusiasm and confidence in his students. Miles described his self-efficacy by saying, "I am a fairly firm believer that anything I offer one student, I am going to offer all students. I am firm believer of meeting a student where they are and trying to tackle individual problems that Student A might have versus Student B."

Charlotte, Evelyn, Karen, Laurel and Marshall pointed to the fact that their teaching practices had become stronger and evolved over time. Laurel also applied this theory to her sense of self-efficacy when she stated

> I think my sense of self-efficacy has changed a great deal over time. When I think about the first students that I had that were probably twice-exceptional, I felt very confused and challenged. I did not know how to address their behaviors, especially. How to challenge them academically was not as hard as how to challenge their behaviors. I think through time I felt better about it but mainly because I can establish a one-on-on relationship with that student and let them know that I respect them.

Charlotte, Evelyn, Henry and Margaret described their practices of reflection. These practices of journaling and reflecting with colleagues going to create this sense of efficacious behavior among the study's participants. A continual growth and attitude that they could never stop learning and making their instruction more meaningful for twice-exceptional students was a part of this sense of self-efficacy.

Research Question 4 response.

What obstacles, if any, prevent effective instruction from taking place in inclusive education?

Participants pointed out many obstacles preventing effective instruction in an inclusive classroom. Several of these obstacles, however, were not necessarily due only to the inclusive classroom and twice-exceptional education, but public-school classrooms in general.

Olivia stated that teachers and community members need to be more open-minded when it comes to twice-exceptional students. For example, she said,

> I know some people in particular that feel like certain types of kids should not be taught like the rest. And that putting them in and mainstreaming them is not always a good thing. But I think you have to be open-minded and I think training and funding are most important.

Olivia's thoughts were echoed by several other study participants. Jack agreed that funding is needed to reduce class size. Charlotte, Evelyn, and Miles also believe that class size can be problematic to forming the relationships needed to create a strong instructional environment for twice-exceptional students. A lack of parental support is seen as an obstacle. Jack stated that "Families make better schools. And great families will make great schools because they expect things." Jack also believed that the pervasive testing that exists in the public schools is problematic. Jack exemplified this when he stated, "Because things happen so fast now, you have all of these tests coming up. You have all of these interruptions."

In general, teachers believed there needs to be more or an awareness of the term twice exceptional and everything that entails. Karen stated "I think there needs to be more information provided to people who work with twice-exceptional students. Whether that come from professional development, hands-on seminars, meetings and communications. I don't feel there is a strong support system in place." Karen believed that just because most of these students are

not failing, does not mean more attention cannot be paid to their individual goals, needs, and instruction.

Summary

This chapter presented a description of the lived experiences of ten general education teachers of twice-exceptional students in one county in Ohio. Rich, detailed descriptions of the study's participants were followed by the description and support of three emergent study themes: Collegial Support, Student-Teacher Relationships, and Ongoing Professional Growth. Three data sources provided a triangulation of the data to ensure reliability and validity. Through the transcriptions of in-depth, open-ended interviews, a focus group, and written responses, the researcher identified and supported the three themes.

The four research questions were also answered in this chapter. Participants described the experience of instructing twice-exceptional students as rewarding, challenging, frustrating and a privilege. Participants pointed to the importance of reflective teaching practices, strong student-teacher relationships, collaboration with fellow teachers in PLCs and TBTs, and a strong sense of self-efficacy as being crucial to a successful, inclusive classroom with twice-exceptional students. Teachers also were firm in their beliefs that large class sizes, lack of parent and family involvement, and an absence of training on twice-exceptionalism as being detrimental to their instruction. Teachers' experiences instructing twice-exceptional students can best be summed up by a quote Olivia, one of the study's participants, attributed to Temple Grandin. "The most interesting people you'll find are the ones that don't fit into your average cardboard box. They make what they need, they'll make their own boxes."

CHAPTER FIVE: CONCLUSION

Overview

Recognition of twice-exceptional students continues to grow in today's classrooms. The problem identified in this study is although there is more recognition of these students in the literature, these students are still often under-identified, do not receive needed services, have trouble in their social interactions, and do not achieve to their highest potential. The purpose of this transcendental phenomenological study is to describe the lived experiences of one northeast Ohio county's general education teachers of twice-exceptional students.

Through the framework of Skrtic's (1991) theory of critical pragmatism and Dweck's (1999) theory of motivation and growth mindset, this chapter examines the findings of this study as related to three identified themes, along with implications considering the relevant literature. Additionally, this chapter provides both the methodological and practical implications of the study's findings, an examination of the study's delimitations and limitations, and recommendations for future research.

Summary of Findings

Three themes emerged from this transcendental phenomenological study of general education teachers instructing twice-exceptional students. Through the examination of in-depth interviews, a focus group, and written responses, findings were triangulated to provide a reliable and valid representation of the participants' experiences (Creswell, 2007). The study centered around four research questions meant to provide responses containing data that informed and created rich, detailed narratives of the participants' experiences. Riessman (2003) described this kind of data collection and subsequent creation of narrative as being a necessity to presenting the

true, lived experiences of the study's participants. The following discussion explains how the responses to each of the research questions impacted the overall findings of the study.

Research Question One

How do general education high school teachers instructing twice-exceptional students describe their experiences in meeting the academic needs of twice-exceptional students in general education classrooms?

All the participants discussed their experiences with instructing twice-exceptional students as exercises in self-efficacy and professional growth. Although participants viewed it as a privilege to teach twice-exceptional students and a role that was important in their schools, it was also a frustrating experience at times because of the lack of knowledge and need to seek out the instructional strategies best for these students. Opportunities to grow both students and professional goals were important to the participants. In fact, despite the difficulties and hardships, participants described their experiences as being very rewarding. Goal setting was often discussed by participants as they worked to improve not only their students' achievement, but also their own abilities to build relationships and form the connections with their students necessary to continued growth.

Important to participants was the idea that all students, no matter their classification, had the right to an equal education. Participants discussed a greater responsibility to themselves, their students, families, and communities when they conveyed their experiences of instructing twice-exceptional students.

Research Question Two

How do general education high school teachers instructing twice-exceptional students address needs of twice-exceptional learners to ensure learning?

Participants indicted that they felt a great deal of responsibility in working to ensure learning of twice-exceptional students. In fact, the study's participants did not differentiate in this respect among their students. No matter their classification, participants indicated they worked collaboratively with their fellow teachers and sought opportunities for further professional growth in order to ensure learning occurred for all their students. Although participants expressed wonder at the fact that they had not heard of the term twice-exceptional prior to the study and that they had never received professional development on the topic, their efficacy shone through as they worked to provide the most beneficial learning experiences for their students.

Research Question Three

How do perceived experiences of general education high school teachers instructing twice-exceptional students affect their self-efficacy when instructing twice-exceptional students?

All participants expressed a great sense of self-efficacy as they continually sought to learn and grow while instructing twice-exceptional students. Teachers reflected after lessons, with several journaling about their teaching experiences so that they could work to improve their instruction. Teachers described how their teaching practices and own confidence had grown over time. They believed that they were better teachers after several years of experience due to the help of their colleagues and time spent building relationships with their students. Never did a participant describe giving up or not wanting to learn. All participants continually sought out teaching methods that could improve individual students, not a one size fits all ideology.

Research Question Four

What obstacles, if any, prevent effective instruction from taking place in inclusive education?

Participants identified several obstacles to effective education in inclusive education. Class size was often pointed out as being problematic. Class sizes are often so large that it inhibited participants from forming the relationships with students required to truly get to know them and their educational, social, and emotional needs. Lack of parental support was also often pointed out as an obstacle. Participants believed that when they could involve students, teachers, and parents in the conversation about twice-exceptional students, then a trust developed, making it easier for teachers and students to forge ahead with an educational plan and set of goals. Unfortunately, some participants saw this as something that has declined over the years of their teaching experience. Funding and lack of professional development were also seen as barriers to the most effective education of twice-exceptional students possible. Study participants saw a need for community members and legislators to become educated on needs of twice-exceptional students so that improvements can be supported both monetarily and ideologically.

Discussion

The purpose of this transcendental phenomenology was to describe the experiences of ten general education teachers of twice-exceptional students. Theoretical and empirical literature guided the initial construction of the study while the identified themes of Collegial Support, Student-Teacher Relationships, and Ongoing Professional Development served to focus the connections to the empirical research and the theories utilized to frame the study.

Empirical Literature

Twice exceptional curriculum and pedagogy. Several studies identified curriculum and pedagogical strategies that can be utilized with twice exceptional students. Killoran, Zaretsky, Jordan, Allard, and Moloney (2013) found that teachers supported a common curriculum and set of strategies for twice exceptional learners. Like the studies of Berma,

Schultz, and Weber (2012) and Bianco and Leech (2010), however, teachers often felt at a loss for knowledge and support. This study corroborated that belief. The fact that eight out of the ten participants in the study had never heard the term twice exceptional before was very telling. Researchers advocated for the creation of a teacher support network for teachers (Killoran et al., 2013). There were few pieces of evidence in the literature that the concept of a teacher support network was being utilized. This study, however, unequivocally showed that teachers did rely on one another for support in the development of curriculum and instructional strategies for twice-exceptional students. Jeweler, Barnes-Robinson, Shevitz, and Weinfeld (2008) supported the use of accommodations through Individualized Education Plans (IEPs) to ensure that students have access to computers and read aloud software for reading and writing, extended test taking time, and were being taught strategies for organization and the improvement of reading and writing skills.

Conclusions from a study on barriers twice exceptional students experienced concluded that a program needs to be implemented through which the identification of twice exceptional students is followed with an approach that encompasses not just the academic needs of students, but also their social and emotional needs (Siegle et al., 2016). The social and emotional needs were the highlight of many of this study's participant experiences with twice-exceptional students.

Lee and Ritchotte (2018) stated, "Working successfully with this unique population requires specialized academic training and professional development" that "ensure the child's academic success and social-emotional well-being such as accommodations, therapeutic interventions, and specialized instruction" (p. 71). The lack of this type of professional development was a factor in how this study's participants described their experiences.

Goal setting. It is important that both teachers and students set goals for curriculum and learning. In fact, research shows that when individuals have a mastery goal orientation, they more readily take part in tasks that will lead them to successful completion of their goals (Little, 2012). Conversely, if a student is motivated to a performance goal orientation, they are only worried about what they will be rewarded with at the end of the activity. The ideology of goal setting was instrumental in how this study's participants approached teaching and learning with twice-exceptional students. It is important that the curriculum designed for students is relevant and important enough to the individual that they will be willing to devote time to its completion (Little, 2012). Teachers must also show an interest in getting to know the students' needs and interests so that their students feel motivated to learn. The building of strong teacher-student relationships was a running theme throughout this study. The belief that the teacher occupies the role as motivator for twice-exceptional students has shown to have had significance in previous studies and was prevalent in this study (Missett et al., 2016; VanTassel-Baska, 2013).

Reflection. Teachers must not only learn to reflect on how to make learning relevant for students, but also on how to provide a curriculum that recognizes the diversity and varying needs of the classroom's learners. There has been a general feeling that often underachievement coincides with the characteristics of many gifted students (White, Graham, & Blaas, 2018). This study's participants described high amounts of reflection through a variety of methods to ensure that students were being seen as individuals and that educational goals were in line with their needs and articulated plans for their futures.

Inclusive general education classrooms. Movements pushing for the inclusion of special education students in the general education setting have ebbed and flowed over the last several years. Inclusion as a general concept has several meanings within the educational

context (Felder, 2018). The incorporation of inclusion naturally has impacted the twice-exceptional student as they are defined within the special education environment (Baldwin et al., 2015; Barnard-Brak, et al., 2015; Bianco & Leech, 2010; McCallum, et al., 2013; Siegle, et al., 2016). In some school settings it may mean that students are housed under one roof with equal access to resources, while in other schools it may mean that each classroom replicates the demographic and academic profile of the greater school. In the context of the current study, participants all described settings where they, as the general education teacher, worked to instruct all students in the classroom, no matter their twice-exceptional, gifted, or special education status. This study's participants' evidence of efficacious behavior to ensure strength of curriculum and building of relationships with students is a testament to how teachers treat their students as individuals, and not according to a label they are afforded by testing.

Theoretical Framework

The first theory that guided this study was the post-modernist constructivist idea of critical pragmatism (Skrtic, 1991). Based on reactions to earlier disability theories, it asks teachers of students with learning disabilities to continually re-examine and evaluate their own pedagogical and construction of curriculum practices alongside their colleagues for the purpose of improving instructional practices for students with disabilities. Participants revealed that they took part in this discourse through their self-reflection and emphasis on continual improvement of the design and content of instruction for twice-exceptional students.

The second theory guiding this study was Dweck's (2012) theory of motivation and growth mindset. Because people usually display the need to evaluate practices and seek to improve them, the theory of motivation and growth mindset applies to this study as it seeks to describe the pedagogical and educational experiences of teachers of twice-exceptional students.

Participants reiterated and corroborated this theory in their need to improve and impart continued learning to their students.

Findings of this study not only corroborated the theories set forth by Skrtic and Dweck, but it added to the theory of constructive critical pragmatism. Skrtic (1991) believed that teachers of special education students continually seek ways to improve their instruction and provide a sense of equality. Skrtic also was not convinced that an inclusive classroom could provide this sense of "democratic education." This study's participants demonstrated, however, that inclusive education, although a great challenge, is supported by teachers who treat students as individuals.

Implications

Several theoretical, empirical, and practical implications emerged from this qualitative study. Implications for educational policy makers, collaborative learning communities, and teaching practices surfaced through the description of experiences of teachers of twice-exceptional students.

Empirical Implications

This study's findings help to advance the study of issues related to the instruction of twice-exceptional general education students and provides a voice to high school teachers where it is currently lacking. Policy makers are often blind to the needs expressed by teachers. For whatever reason, teachers are often portrayed as unwilling to work and looking for an easy way out. Nothing could be further from the truth. The study's participants' experiences support the fact that teachers are continually looking for ways to improve the educational experiences of their students. Yet, they still must cope with large class sizes, lack of funding, parental support, and needed professional development in relatively unknown realms like twice-exceptionalism.

While some studies exist that examine teachers' experiences with gifted or learning-disabled students, few examine the teacher's experiences with the twice-exceptional learner and there are no known studies that examine the experiences of general education high school teachers (Schultz, 2012; Siegle et al., 2016; Szymanski & Shaff, 2012).

Theoretical Implications

This study helps to advance the constructivist and disability theory of critical pragmatism by adding to the collaborative and evaluative strategies used by the teachers of twice-exceptional students (Skrtic, 1991). Skrtic believes that it is important for teachers to collaborate and work with one another to establish strong, instructional practices. This is especially important in the world of Special Education and even more important in the little-studied realm of twice-exceptionalism. No known studies examine these collaborative efforts on the part of general education teachers of twice-exceptional students (Musset et al., 2016; Ng, Hill, & Rawlinson, 2013; Rowan & Townend, 2016). This study imparts an overview of the collaboration that takes part on behalf of both special education and general education teachers. This study showed that general education teachers often seek the support of the intervention specialists within their schools to ensure that the strongest educational plans are in place for twice-exceptional students.

Practical Implications

This study helps to support the need for teachers to become better curriculum writers, collaborators, and teachers committed to improving the teaching and learning of twice-exceptional learners (Bandura, 2012). Teachers' self-efficacy may be an important factor in improving the teaching experiences with twice-exceptional students (Jeweler et al., 2008; Killoran et al., 2013). As noted in several studies, teaching the twice-exceptional student involves many stakeholders (Alloway, Elsworth, Miley, & Seckinger, 2016; Killoran et al., 2013;

Lo, 2017; Missett, Azano, Callahan, & Landrum, 2016). This research is significant in that it not only sheds light on the work teachers and administrators do, but also how important parents and the students themselves are in the collaborative practice of improving the phenomenon of twice-exceptional teaching. The study also shows policy makers and community members that teachers utilize their most important resource, the knowledge and experience of the fellow teachers, to the maximum. Perhaps this can provide the impetus for the decreased class sizes, increased funding, and improved professional development advocated for by the participants in this study.

<div align="center">**Delimitations and Limitations**</div>

Delimitations of this study included a minimum of three years' experience in a general education setting in a high school. The three-year mark was used because the state of Ohio recognizes teachers with three years of experience as qualified teachers and are not given the designation of unqualified in state reporting. The participants were also required to have at least one twice-exceptional student assigned to them in the school year in which the interview was conducted.   Approximately 150 teachers were designated as being instructors of general education students across the three high schools utilized in the study. Another delimitation to the study was the fact that I was unable to use my own experiences during the study. I journaled after each of the interviews to help to limit my own bias because I also have instructed several twice-exceptional students during my career.

Limitations to the study included the actual pool of potential candidates for the study. Although three high schools were initially targeted, only two of the schools produced willing candidates. Many candidates seemed apprehensive to take part because they worried that they did not know what twice-exceptionalism was or would appear uneducated. As a result, the

study's participants came from two schools in one county under the direction of one educational service center. Therefore, the educational policies and practice of inclusion for special education students were relatively the same. Although split in terms of gender and including teachers from all four core content areas, the average number of years of experience participants held was over 16 years with most participants being in their forties.

Recommendations for Future Research

There are still significant gaps in the research on twice-exceptionalism not filled by this study. Because so few teachers in the study were familiar with the term, it significantly limited their knowledge base of twice-exceptional teaching strategies. Although participants demonstrated a depth of knowledge in terms of collegiality and efficacious teaching models, further studies should go more in-depth with studies where participants can describe their experiences using proposed models and pedagogy teaching twice-exceptional students. Future studies should expand upon the participant pool to include teachers who have fewer years of experience than those in this study. More studies are needed in a range of geographical areas, urban, and rural areas.

A definite gap in the research exists concerning professional development for teachers of twice-exceptional students. Studies in regions where this has been made a protracted effort for specific twice-exceptionalism teaching is important to determine whether specific strategies are effective or if the more generalized practices of self-efficacy and professional collegiality are the most effective means of professional development.

Finally, more research is recommended on the practice of inclusion. All participants in this study taught in inclusive classrooms. Whether the practice of inclusion itself is the most

effective in evaluating twice-exceptionalism and its connected teaching practices is an important question to ask.

Summary

The identified problem that twice-exceptional students are often under-identified, do not receive needed services, experience social and academic issues, and do not reach their highest potential is personal due to the number of years I taught these students in my classroom. Teachers work diligently to collaborate, develop professionally, and form relationships with twice-exceptional students in order to provide them with the best education possible. Policy makers, community members, and sometimes school administrators, do teachers a disservice by not providing them with monetary and professional development resources. Teachers, at their core, strive to better themselves, their students, and their communities each day. Providing them the necessities to continue to do so should not only be required but expected in a society that provides a public education to all its students in the pursuit of equality and improving the lives of people in the world around them.

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APPENDIX A: IRB APPROVAL LETTER

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 30, 2019

Jill Denise Collet
IRB Approval 3630.013019: A Transcendental Phenomenology of General Education Teachers'
Experiences Instructing Twice-Exceptional High School Students

Dear Jill Denise Collet,

We are pleased to inform you that your study has been approved by the Liberty University IRB.
This approval is extended to you for one year from the date provided above with your protocol
number. If data collection proceeds past one year or if you make changes in the methodology as
it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms
for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to
specific, minimal risk studies and minor changes to approved studies for the following reason(s):

> 7. Research on individual or group characteristics or behavior (including, but not limited to, research on
> perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social
> behavior) or research employing survey, interview, oral history, focus group, program evaluation, human
> factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt
> from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing
> refers only to research that is not exempt.)

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

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

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APPENDIX B: RECRUITMENT LETTER

April 1, 2019

Dear Teacher,

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 in curriculum and instruction. You have been identified by your district's superintendent, school principal, or a colleague, as a potential subject for study. I am writing to invite you to participate in my study on the experiences of high school teachers instructing twice-exceptional students in the general education setting.

If you are willing to participate, I will be asking you to participate in a face-to-face, recorded interview, take part in an online focus group, and respond to four writing prompts in narrative form. You should be able to complete your participation in approximately two to three weeks, with it taking four to five hours of time to complete all procedures. Your name and/or other identifying information will be requested as part of your participation, but the information will remain confidential.

To participate, please review the consent document and respond to my email with your desire to be a possible participant. I will contact you for an interview. At that time, I will provide the consent form for you to sign. The consent document contains additional information about my research.

Sincerely,

Jill D. Collet
Doctoral Candidate
Liberty University

APPENDIX C: INFORMED CONSENT

CONSENT FORM
A TRANSCENDENTAL PHENEMONOLOGY OF GENERAL EDUCATION TEACHERS'
EXPERIENCES INSTRUCTING TWICE-EXCEPTIONAL HIGH SCHOOL STUDENTS
Jill D. Collet
Liberty University
School of Education

You are invited to be in a research study investigating the experiences of general education teachers instructing twice-exceptional students in high school. You were selected as a possible participant because you have experiences teaching students in your classroom with characteristics of twice-exceptional students. Please read this form and ask any questions you may have before agreeing to be in the study.

Jill D. Collet, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this transcendental phenomenological study is to describe the lived experiences of general education teachers of academically gifted students who are twice-exceptional in one county's high schools in northeast Ohio.

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

1. Participate in a face-to-face interview with the researcher. The interview will take approximately one to hours. The face-to-face interview will be audio-recorded, but pseudonyms will be used to maintain confidentiality.
2. Participate in an online focus group through which several prepared questions will be answered. The online focus group will be conducted using an online discussion board format. Participation will take approximately one hour. Pseudonyms will be used to maintain confidentiality.
3. Respond to four prompts on teaching twice-exceptional students in your classroom. The written responses will take approximately one hour to complete. Pseudonyms will be used to maintain confidentiality.

Risks: The risks involved in this study are minimal and are no more than what participants encounter in everyday life. If you experience discomfort while taking part in this study, you may choose to stop participating at any time.

Benefits: The direct benefits participants should expect to receive from taking part in this study will be understanding the experiences of high school general education teachers instructing twice-exceptional students in their classrooms. While your participation may have potential benefits to education as a whole, you many not receive any direct benefits from your participation.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I 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. I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data.

- Procedures will be taken to protect the privacy of the all participants including the use of assigned pseudonyms and interviews conducted in locations where others will not easily overhear the conversation.
- Data will be stored on a password-protected computer and all documents will be kept in a locked file cabinet. Data may be used in future presentations.
- Interviews will be transcribed by the researcher. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- I cannot assure participants that other members of the online focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or school districts within Stark County. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How 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, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Contacts and Questions: The researcher conducting this study is Jill D. Collet. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at 330-696-7420 and/or jcollet@liberty.edu. You may also contact the researcher's faculty chair, Dr. Rebecca Lunde at 419-681-1034 or rmfitch@liberty.edu.

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. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: 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 audio-record me as part of my participation in this study.

_____

Signature of Participant   Date

_____

Signature of Investigator   Date

APPENDIX D: VALIDITY AND RELIABILITY OF INTERVIEW QUESTIONS

Moustakas' (1994) data collection methods most commonly included the long interview for "evoking a comprehensive account of the person's experience of the phenomenon" (p. 114). Upon transcription of the interviews, the researcher then organized the data so that equal value was placed on each, the statements were then clustered into themes, and then these themes were used to "develop the textural description of the experience" (Moustakas, 1994, p. 118). This textural description was then used to create a structural description of how the participants experienced the phenomenon based on the situation and context. All this combined created the overall essence of the phenomenon. In keeping with the nature of the phenomenology, the long interview will be utilized in this research study.

Individual interviews will be conducted with each of the study's participants. Teachers will be interviewed at a place of their choosing and semi-structured questions will be used to allow participants to elaborate upon their experiences (Creswell, 2013). Interviews will be recorded by two different digital voice recorders and then later be transcribed by the researcher. Two pilot interviews will be conducted for refining the questions. Member checks will be utilized to ensure accuracy of the transcribed responses. These interviews will be in a place of the participant's choosing. Interview questions will be changed and added to according to the participant's responses.

Standardized Open-Ended Interview Questions

1. When and why did you begin teaching? For how long?

2. What is your current teaching position? Grade? Subject?

3. When did you begin teaching twice-exceptional students?

4. How would you describe your experience of teaching twice-exceptional students?

5. What have you learned about teaching from twice-exceptional students?

6. What have you learned from your colleagues while teaching twice-exceptional students?

7. What training have you had in teaching twice-exceptional students?

8. What does it mean to be a teacher of twice-exceptional students?

9. How have your teaching practices evolved from the time you began teaching twice-exceptional students to now?

10. How do you incorporate the practice of reflection in your teaching?

11. Bandura (2012) discussed the practice of efficacy as being the ability of teachers to achieve desired outcomes through a variety of methods. How would you describe your sense of efficacy when it comes to the twice-exceptional students in your classroom?

12. How should people support the education of twice-exceptional students?

13. What else would you like to tell me about the education of twice-exceptional students?

The purpose of questions one through three will be to establish that the participants fit the criteria for the study and for the researcher to gather demographic data to ensure the study may be replicated in the future. The purpose of questions four, five, six, eight, and thirteen is to allow participants to elaborate on their experiences with twice-exceptional students (Moustakas, 1994). Questions nine through 12 allow teachers to reflect upon their practice and self-efficacy (Bandura, 2012).

APPENDIX E: VALIDITY AND RELIABILITY OF FOCUS GROUP QUESTIONS

Although Moustakas concentrated on the interview, other data collections may be used in the phenomenological study such as poems, observations, and documents (Creswell, 2013). Moustakas (1994) believed that through the collection of various forms of expression the researcher could gain further insight to the essence of the experience. An online focus group will therefore be created for the participants in the study. Identified strengths of the use of the focus group includes the opportunity to hear from a variety of different perspectives, it can enhance data quality by allowing participants to monitor themselves and one another, lack of discussion on certain topics can be revealing, and the focus groups themselves are often reported to be enjoyable to the participants (Patton, 2015). Focus group questions will be guided by the responses given during earlier interview questioning of participants and may emerge as the study and data collection and analysis evolves. Patton (2015) believed that focus groups can provide information consistent about a phenomenon. The questions were semi-structured and allowed for the interviewer to support information gathered from earlier interviews and elaborate through questioning earlier phenomenon. One focus group will be held utilizing a Google platform that allows for participants to take part in the group virtually from their differing locations. The focus group discussions will be recorded and then transcribed. One to two participants will be asked to participate from each school in the online focus group as this will allow for a greater dissection of the overall study's participants and will provide a sufficient focus group size (Patton, 2015). This focus group will be formed for providing elaborated information to earlier findings from the interview questions.

Focus Group Open-Ended Questions

   1. What challenges have you experienced when teaching twice-exceptional students?

2. Do you work with other general education teachers when planning activities for your classroom and twice-exceptional students?

3. What kinds of professional development have you been provided when instructing twice-exceptional students in your general education classrooms?

4. What differences exist, if any, in general education classrooms where you have instructed twice-exceptional students and where you have not?

Questions one through four were developed from the research findings that supported feelings by teachers that they were not supported when instructing twice-exceptional students (Callahan et al., 2015; Gari, Mylonos, & Portesova, 2015; Killoran et al., 2013).

APPENDIX F: VALIDITY AND RELIABILITY OF WRITING PROMPTS

Participants will be asked to respond to three to four writing prompts for capturing reflections and clarification of information obtained from the interviews and the online focus groups. Although these questions may evolve dependent upon the data collected during the interviews and online focus groups, the questions are expected to follow the following general format.

Writing Prompt Questions

1. What challenges do you encounter while teaching twice-exceptional students in your classroom? Do you see challenges appearing in the future and if so, what are they?

2. Describe your feelings of self-efficacy when it comes to teaching in your classroom. Has this self-efficacy grown as you have instructed twice-exceptional students? Why or why not?

3. By whom and how do you feel supported in this endeavor of teaching twice-exceptional students in your general education classroom?

4. What steps do you feel you have to take to effectively grow as a teacher of twice-exceptional students in your general education classroom?

These few questions will allow for reflection and will result in open-ended responses that will aid in terms of qualitative inquiry (Patton, 2015).

APPENDIX G: PARTICIPANT DEMOGRAPHICS

Pseudonym	Gender	Race	Age	Subject(s) Taught	Years' Experience
Charlotte	F	Caucasian	40-49	English	16
Evelyn	F	Caucasian	30-39	English	8
Henry	M	Caucasian	40-49	Social Studies	18
Jack	M	Caucasian	50-59	Science	30
Karen	F	Caucasian	40-49	English	17
Laurel	F	Caucasian	40-49	Social Studies	19
Margaret	F	Caucasian	50-59	English	33
Marshall	M	Caucasian	50-59	Math	25
Miles	M	Caucasian	40-49	Social Studies	6
Olivia	F	Caucasian	40-49	Science	21

APPENDIX H: THEME DEVELOPMENT

THEMES	RELATED CODES
Theme 1: Collegial Support	• Community • Cross-Curricular • Collaborating • Communication • Discuss • Reflect • Teaming • Inclusion • Teacher Based Teams • Learning • Professional Learning Communities • Family • Conversation • Listening • Planning • Coaching • Role Models • Enthusiasm • Specialists • Support • Classroom Visits • Inclusive Classrooms • Special Education • IEP Discussion
Theme 2: Student-Teacher Relationships	• Sense of Humor • Relate • Greet • Noting Interests • Activity Attendance • Differences • Knowing • One-on-One • Differentiation • Choice • Patience • Routines • Self-Esteem • Persistent

- Cheerleader
- Attention
- Emotional Needs
- Goals
- Comfortable
- Flexible
- Understanding
- Sense Perception
- Unpredictable
- Openness

Theme 3: Ongoing Professional Growth

- Not Discussed
- Lack of Training
- Diversity
- Professional Development
- Challenging
- Time
- Difficult
- Access
- Case Management
- Counseling
- Class Size
- Reflection
- Encouragement
- Learn from Experience
- Methodology
- Journaling
- Authentic Change
- Self-Assessment
- Trying
- Rubrics
- Goals
- Assessment
- Thrive
- Strengths
- Weaknesses
- Equity
- Fairness
- Excellence
- Learning
- Change
- Funding
- Social Needs
- Psychological Needs

- Academic Needs
- Uncomfortable
- Knowledge
- Workshops
- Timeliness

APPENDIX I: REFLECTIVE JOURNAL EXCERPT

Journal: 5/21/2019 (Laurel)

My assumption all along in my research process has been that teachers know little about twice-exceptionalism. In many of my interviews, teachers have not been familiar with the term. They do have a working knowledge of the meaning of the term at work in their classrooms, however. Whether it was this teacher's experience or interest in the topic, she was extremely knowledgeable about the many nuances of the subject, and was even able to discuss not just its characteristics, but multiple examples of students she has taught in her classes. Her recognition that even one of those students is different was eye-opening and her ability to adapt her teaching to their needs was a true testament to what is good teaching. Through this experience, I know that I should not make assumptions about teachers' depth of knowledge on the topic of twice-exceptionalism based upon my own teaching experiences in the classroom.