Gifted and Talented Middle School Educator Perceptions of Program Implementation During COVID-19 Protocols

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Dedication

This study is dedicated to my dad, Stanley W. Davis (April 20, 1935 -June 20, 2021), who was a life-long learner until his last day in this life. Ironically, COVID-19 sparked the need for this research study, then took his life toward the conclusion of the study. As an educator and friend to many, my dad dedicated his life to helping others access what they needed to learn, to do, or to achieve. My hope is that this study honors his memory, urging educators to think critically as he did, to find practical solutions to daily concerns. May this dissertation prompt educational stakeholders to seek out how gifted and talented students should be guided toward becoming life-long learners as he has been.

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Abstract

Background: Providing appropriate and equitable services to the special population of Gifted and Talented (GT) students is the responsibility of educators and educational leaders throughout the United States. During 2020-2021, the COVID-19 pandemic presented barriers to meeting the educational needs of all students. Federal and state policy makers mandated safety protocols to mitigate the spread of the COVID-19 virus. In the spring of 2020, educational leaders, both globally and locally, shifted to online "virtual" learning during the mandatory "shut down". As educational entities strategically planned for the 2020-2021 school year, the online learning platform proved necessary for many districts. **Purpose:** This study gathered educator perspectives to assess the impact of a COVID-19 protocols on GT educator experiences. **Question:** What are middle school GT educators' perceptions regarding the impact of COVID-19 protocols on their implementation of GT student learning opportunities? **Method**: This study employed a qualitative case study to collect and analyze data regarding middle school GT educator perceptions of the impact that COVID-19 protocols had on their own implementation of GT learning opportunities. Four participants were selected via purposeful convenience sample of middle school GT educators currently providing instruction to GT students in a large urban school district in Texas. To ensure data credibility, participants provided data in four phases: 1) a semi-structured survey, 2) an individual interview, 3) a member check interview, and 4) a focus group to gather information about implementation experiences. The researcher employed six steps to qualitative thematic analysis to code, analyze, and report findings. Following the data analysis, district-level GT specialists reviewed these data sets to ensure trustworthiness. This study adds to the literature on

middle school GT educator experiences and how those experiences influence GT student learning experiences in the midst of COVID-19 protocols in both face-to-face and in online learning. **Findings:** After acquiring responses from the participants, four themes emerged: 1) GT curriculum that encourages the application of critical thinking skills in personally relevant ways to support GT students more appropriately is needed; 2) COVID-19 protocols both hindered and created opportunities for GT student growth; 3) GT professional development should include cross-curricular critical thinking application strategies; and 4) GT educators and parents should more effectively communicate valuable information about GT individual student qualities, expectations, and progress at the secondary level. **Conclusion:** GT educators have unique access to GT learning experiences necessary to inform GT program decision making. Post-Covid education requires pedagogical reflection by GT educators and leaders to evaluate current GT implementation to provide more effective GT services considering challenges experienced during COVID-19 protocol administration. As observed by GT educators, some GT students excelled under novel circumstances acting on their intrinsic motivation and grit, yet other GT students completed minimal tasks. Future GT services must address individual GT student needs by evaluating possible educational gaps as well as providing scaffolded intellectual challenges. GT educators require tailored GT professional development supported by funding and personnel from GT administrators and GT decision makers at local levels. Unique GT students deserve individualized support.

Keywords: GT implementation, giftedness, middle school gifted and talented perceptions

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Chapter I

Introduction to the Study

"What is success?"

> To laugh often and much; to win the respect of intelligent people and the affection of children; to earn the appreciation of honest critics and endure the betrayal of false friends; to appreciate the beauty; to find the best in others; to leave the world a bit better, whether by a healthy child, a garden patch or a redeemed social condition; to know even one life has breathed easier because you have lived. This is to have succeeded!
>
> —Ralph Waldo Emerson

Introduction

Education is in my blood, literally. I have discovered multiple teachers in my family tree. Even as a small child, I knew I wanted to be a teacher. I loved school and still do. In general, learning is fun for me, except when it's not (thank you, algebra). I believed, until I found out otherwise, that all students liked to go to school just like me. After speaking with friends, I discovered that some students enjoy and thrive in traditional educational settings, while others do not. I have also found that asking probing questions and corresponding answers about teacher-student interactions can uncover what is and is not working in classrooms. Formative assessments such as scaffolded questions are part of best practices in classrooms to gauge student learning. Likewise, formative assessments are needed for educator learning. Effective educators evaluate strategies adjusting to meet the needs of their learners and in so doing, become better at their craft.

Professional insights into classroom environments offer a fresh look into how students achieve success academically, culturally, socially, and emotionally. Without teacher input, it is impossible to hone public education into a more effective, healthy living system.

No system is perfect, and the public education system is not immune to deficiencies. One group of students affected by the traditional public education system in the US is the Gifted and Talented (GT) population. GT students often get lost in the shuffle because they are recognizably advanced and master concepts quickly and thoroughly---frequently far beyond their peers. Unfortunately, the educational potential of an individual GT student may not be met due to the fact that these students' academic successes easily meet local, state, or federal guidelines for meeting standards with little intellectual effort. However, these minimum requirements set a low bar for what a GT student may be truly capable of. Therefore, educators and administrators are the key to enriching the GT students' learning environments so they may be challenged, eventually reaching their educational potential. Innovative and effective educators enable student success through change. All students should experience success (Ladson-Billings, 1995).

Personal Narrative

As a child, I studied in public schools in Texas and a private school in Saudi Arabia. The vast differences in these two societal and social cultures played a foundational part in how I view students, their education, cultures, communities in which I am involved, and my part in each environment. These differences have led me to ask reflective questions since I was very young. One such critically reflective question was born out of the first moment I came into tangential contact with a GT class during a

unique moment in the fifth grade in Texas.

I had returned home from Saudi Arabia after nearly four years abroad, and re-enrolled in my former elementary school. One day sitting at my desk, I watched my best friend and some other students as they were escorted from our current class to go to a new location. In an open concept school, it was easy to see where they went, but not what they were doing. I asked my teacher why they left the class. She replied with a minimal answer, “They have a GT class”. I asked if I could go, but I was told “No” with no explanation. That curious event set in motion my next question, “What is a GT class?” Later, as an educator, I would eventually find out.

For over twenty years, teaching seventh and eighth grade science as well as engineering classes, I have interacted with approximately one hundred thirty-five students in my classroom per year. I have taught both regular and advanced science for seventh and eighth grade. Every year, I have met at least one student with extraordinary abilities regardless of the type of class they were enrolled in, regular or advanced, who was not yet coded as “GT” in their demographic information. I remember several uncoded general population students who had the potential to qualify for GT services, some of whom told philosophical stories on an adult level, explained quantum particle behavior as if they designed the theory, or created art that could be sold in a gallery.

As I learned more about these students, I wondered *why* some students with exceptional abilities and skills were not previously identified as GT. Did their abilities simply bloom overnight? Were they now in such a different environmental setting in middle school so that their gifts or talents were cultivated in a new way? For me professionally, it was quite obvious when certain unidentified GT students stood out

among other classmates. Each of these students rose far above the average intellectual, creative, emotional, or leadership level than others in their peer groups. As a seasoned educator, additional questions emerged from such experiences: “Were these students lost in the shuffle? Why were they not identified as GT in elementary school? Can they still be coded as GT or is too late and unnecessary?” I decided to find out more about our GT program from specialists at the district level.

I continue to ask difficult questions to seek a more equitable identification process that seems to omit students simply because they passed beyond a certain grade level. I believe that giftedness does not have an expiration date. My personal endeavor is to make certain that all students who exhibit potential giftedness or talent across various cultures are appropriately identified as GT using multiple assessment criteria so that no child misses an opportunity to receive an equitable education to experience their own personal educational success.

Statement of the Problem

Educators have varying levels of understanding of their school or district’s GT programs. Teachers’ experiences shape their understanding of the GT enrichment they provide to students. Understanding GT educators’ perceptions of their direct involvement in a GT program or services is useful for acknowledging strengths as well as addressing concerns. An accurate portrayal of GT educators’ valuable viewpoints offers district stakeholders a window into the current state of the district’s GT offerings. A large, public school district may be unaware of its own effectiveness due to the sheer number of employees and students. Therefore, teacher perspectives are necessary and useful for creating district-wide awareness. Teacher input is a significant evaluative tool and

component of collaboration through professional discussions toward the healthiest GT program possible. Once aware of GT educators' concerns, directives can be set in motion to adjust and monitor the effectiveness of GT programming and/or services throughout a district. In addition to addressing the countless normal variables presented within a school district, COVID-19 presents novel issues directly affecting public education from the way that students wait to enter a school building in the morning, to the procedures of receiving and eating lunch, to the configurations of physical classrooms, and each interaction between educators and their students. The impacts of COVID-19 caused a complete re-design of traditional public education.

Purpose of the Study

This study investigates the perspectives of GT educators by collecting their various experiences as they implement GT services in a large, urban public school district in south central U.S. during the administration of COVID-19 protocols. By gathering multiple perspectives from several veteran GT educators performing different educator roles, several facets of the GT program will be explored more deeply to create a realistic picture of the GT learning experiences provided while under the guidelines and constraints of COVID-19 protocols. Multiple GT educator perceptions of strengths and constraints identified during their implementation of learning opportunities during the 2020-2021 school year are addressed in this study. Themes that have emerged from middle school GT educator perspectives are presented to provide awareness and direction to inform future educational decisions and possible future research.

Significance of the Study

This research study has multiple significant characteristics. COVID-19 has

presented mandatory stipulations within educational work environments and learning environments. The unyielding criteria by which educators, their students, and their administrators has required much change to all aspects of public school environments during the 2020-2021 school year. Middle school GT educators working in public education shared their perceptions of implications of COVID-19 protocols mandated due to the pandemic. The participants' collective views reflect an average educational experience of 15.4 years in public education and an average of 12.8 years specifically spent educating GT students (See Appendix B). Their lengthy professional educational experiences provide multiple credible perspectives due to the sheer duration of their teaching. These middle school educators provided unique perceptions in response to novel circumstances. Both local and global educational stakeholders can use this data to help identify relative concerns brought about by COVID-19 on specific campuses.

To provide a relative analogy, imagine an educational system as a "living machine". School districts are made of living, breathing, ever-changing people who make up a system. In essence, educators, students, administrators, parents, and community members are all part of a living education system or machine that functions with varying degrees of success just as the human body has multiple systems all working together. People visit the doctor when they want to "check-up" on their systems or when they suspect there is a problem or notice an illness. Humans seek medical attention when they are injured or sick because they know that if one part of the body system malfunctions, it affects the rest of the body. I believe the same to be true for an educational system, such as a school district. If a population of students is not served properly, the overall health of that educational system is also at risk. GT programming and services are at risk when

students do not receive proper learning opportunities.

The health of a district's systems, or their "programs", affect students and educators directly. For example, a GT program may prove "healthy" in one area such as differentiation. If so, a GT teacher can continue educating students using current, productive teaching pedagogy to offer choice and challenge to their GT students. If, however, the GT program is unhealthy in some way, then students may be in a "non-healthy", or at best, a non-nurturing environment. Evidence of a negative GT environment could occur when GT students refuse to take risks by answering questions due to fear of judgement or failure (Gay, 2018). The symptom of a problem is a student's unwillingness to participate or take risks. Taking risks requires a safe, nurturing environment. The student's action, or lack thereof, indicates an educational barrier and problem (Ford, 2018). To remedy the "symptom", a problem must be identified and new strategies must be incorporated to change the culture and climate of that particular GT environment (Ford, 2010; Ford et al., 2018; Gay, 2013; Gay, 2018). If unhealthy program services are left unchanged after being discovered, negative classroom situations could lead to *educational neglect* that educators have an obligation to address and correct (Ford, 2018). Fortunately, when GT educators are aware of problems, then the process of change can begin (Gay, 2018). There is hope for each system and program to become healthier and more efficient as the needs of both students and educators who serve them are identified.

Why does having a healthy GT program matter in the bigger scheme of things? I believe that education can do better at preventing students from falling through any faulty and perhaps hidden) holes in the system. By sharing their educator experiences, GT

teacher perspectives can provide a "baseline" of the GT program services these GT educators are intimately acquainted with and currently provide for GT students under COVID-19 protocols. Once aware of these teachers' perceptions, a district has the opportunity to celebrate successes and address any identified deficiencies. If the district determines that change is needed and decides to implement new strategies to support any deficiencies, other districts may take note of the district's GT program changes and future research to check the health of their own educational system or its programs. As districts agree to involve local, contextual research investigations as accountability, then perhaps middle school GT program services will be more completely supported as they move toward maximizing potential educational success for each GT student through a healthier GT program.

Theoretical Framework

This research focuses through the lens of culturally responsive teaching (CRT) and culturally responsive pedagogy (CRP). Gay (2002) summarizes culturally responsive teaching as "using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (p. 106). According to Ladson-Billings (1995), culturally relevant pedagogy occurs when teachers support, encourage, and help students "experience academic success", when teachers "utilize students' culture as a vehicle for learning" through specific, authentic cultural samples, and when teachers actively develop "critical consciousness" within students so they may evaluate "cultural norms, values, mores and institutions that produce and maintain social inequities" (p. 160-162). It is clear that specific ethnic groups such as American Indian, Hispanic American, and African American students are underrepresented in GT programs

across the nation (Callahan, 2005; Ford, Baytops & Harmon, 1997).

It is imperative to provide CRT practices in a GT classroom to nurture all gifted students to the best of their ability and advance them toward their educational potential. Effective GT educators who employ CRT into their classroom provide awareness, respect, and a classroom culture of inclusion. As more educators see the basic need for CRT in their own classrooms, perhaps more underrepresented students who possess giftedness will be identified and served by their educational system. The research to be presented is firmly grounded within culturally relative framework. However, CRP coupled with the Theory of Successful Intelligence must be noted (Sternberg, 2006). Sternberg states that Successful Intelligence is reflected "…within one's sociocultural context" (p. 90). These two theories go hand-in-hand.

If implemented genuinely and with fidelity, CRT could highlight high ability intelligences in people groups never noticed before due to cultural incognizance. Perhaps the unique perspectives of GT educators who actively apply CRT to their classroom, curriculum, or program will shed light on hidden gifted "treasures" tucked away within a specific culture. Sternberg (2006) further explains that individuals must leverage their strengths against their constraints to experience success. In addition, he states that individuals must balance their "analytical, creative, and practical abilities" … "in order to adapt to, shape, and select environments" (p. 91). Because people have varying abilities and various levels of access to educational and vocational opportunities, it is necessary to look beyond traditional schoolhouse giftedness and extend CRT to identify creative (Renzulli, 2012) and practical giftedness (Sternberg, 2006) within the context of students' foundational culture. This research study uses both a culturally relevant framework and

the giftedness framework supported by substantial literature.

Research Question

Because teachers possess essential primary insight into the health of an educational system and its programs, those intimately connected to a program should be asked about their experiences (Howard, 2003; Ladson-Billings, 1995). To acquire the most current data about the GT program in a school district, it is logical to gather educator perspectives from those who directly educate GT students. In addition, the novelty of the present circumstances surrounding COVID-19 and its effects are also addressed in the research. Therefore, the research question that this study addresses is specifically focused on GT educators' perceptions at during the 2020-2021 school year: *What are middle school GT educator perceptions of COVID-19 protocol impacts on their implementation of GT services?*

Definition of Terms

The current policy outlined by the U.S. Department of Education states that *giftedness* includes this multicultural definition:

> Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared to others of their age, experience, or environment. These children and youth exhibit high performance capacity in intellectual, creative, artistic areas, or all of these; unusual leadership capacity; or ability to excel in specific academic fields. They require services or activities not ordinarily provided by schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor. (ESSA, 2015, p. 26)

Renzulli (2012) explains that students may present gifted behaviors that could fall under what he calls “schoolhouse giftedness” when students excel in traditional school settings or “creative productive giftedness” when students may excel outside of the classroom in less traditional methods of giftedness such as inventing, performing, designing art or programs, and other facets of talent. These additional giftedness descriptions agree with the U.S. Department of Education’s 1993 definition. This definition is provided to offer clarity in future discussions and explanations. The Texas Education Code (TEC) Chapter §29.121 regarding Educational Programs, reflects a similar definition of gifted and talented with the following description:

> “‘gifted and talented’ means a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment, and who:
>
> (1) exhibits high performance capability in an intellectual, creative, or artistic area;
>
> (2) possesses an unusual capability for leadership; or
>
> (3) excels in a specific academic field.”

Gifted and Talented (GT) programs or GT curriculum are, in short, the services offered to students who are identified with giftedness to enrich their learning experiences and propel them toward their educational potential. Much discourse regarding characteristics of GT best practices for GT programming will follow in detail.

Summary

Classroom teacher perceptions are a foundational part of assessing and analyzing the current condition of any educational program due to the interactions between GT

educators and GT students. This research study gathered several GT educator perceptions to identify their perceived impacts of COVID-19 protocol administration requirements on GT learning experiences currently offered in a large, urban public school district. The current literature on middle school GT educator perceptions is limited. Little research in the area of middle school GT educator perceptions occurring in or influenced by COVID-19 protocols exists at this time. This study will attempt to fill this gap in the literature.

The following review of literature provides historical and current knowledge based on prior research in the areas of GT and CRP. The purpose of the literature information is: 1) to lay a foundational cause for this research as a case study, 2) to provide existing information about GT history and policy, 3) to describe effective GT program characteristics, 4) to explore effective CRP and CRT practices within GT services, 5) to discuss necessary teacher education (TE) and professional development (PD) with regard to GT and CRP/CRT to support all students, and 6) to describe the role of parents in GT programming.

Chapter II

Review of Literature

"The important thing is that you've got a strong foundation before you start to try to save the world or help other people."

—Richard Branson

Introduction

Educators all over the world strive for success for and with their students daily. This endeavor is not taken lightly by many as they consider education a calling or their purpose. Teachers and administrators are responsible for appropriate education for each individual child and the process of learning is unique one. As educational systems in the U.S. have become more aware of specific needs of different populations of students over time, federal, state, and local governments have begun to address issues and concerns to more effectively meet each student's needs. Concern still hovers around a small but important student population of high achieving, gifted, and talented students. Addressing their particular needs is quite different from addressing the needs of other student populations. This population can include students from varying backgrounds even though numbers of each subpopulation may vary drastically depending on multiple reasons. The evolution of this group of students into a formally identified population is important to note as well as how current educational strategies and procedures attempt to provide them an equitable education.

Gifted and Talented Background

Students who possess higher than average abilities in various areas of thinking or

performing are sometimes described as gifted or talented (GT). Since the 1920s, giftedness has been investigated by educators and psychologists, among others. United States policymakers took a closer look at the gifted population during the 1950s. After the launch of the Soviet rocket, Sputnik in 1957, The U.S. government passed *The National Defense Education Act* (NDEA) in 1958 as the first federally funded and promoted endeavor regarding gifted education in order to invest in American human capital (Ford, 2012). Title VII of the NDEA provided funding for "guidance, counseling, and testing identification and encouragement of able students" (1958, p. 18). The NDEA provided $15 million per year for four years to aid state entities as they develop guidance and counseling programs in public schools. In addition, NDEA aided in assessing private school students under this section.

The Civil Rights Act passed and became US law in 1964 paving the way for Lyndon B. Johnson to sign the Elementary and Secondary Education Act (ESEA) into law to address inequalities for minorities within the educational system in 1965. Ironically, ESEA did not address gifted education. In response to Public Law 91-230, the United States Commissioner of Education, S. P. Marland researched, compiled, and presented *Education of the Gifted and Talented Volume 1: Report to the Congress of the United States*, commonly known as "The Marland Report", in 1972, as guidance to support gifted students. The Marland Report denoted the "first formal definition" of giftedness to include "leadership ability, visual and performing arts, creative or productive thinking, and psychomotor ability." (Ford, p.85; Marland, 1972).

Marland (1972) concluded multiple findings among which was that local and state entities look to Federal leadership in the area of gifted and talented education (GATE).

Unfortunately, at that time, the Federal government's role was "all but nonexistent" (Marland, p. 11). Marland furnished ten activities that the Federal government would be responsible for implementing summarized here to include 1) denoting personnel to manage and become accountability for evaluation of GATE, 2) using current legislature including ESEA to support GATE, 3) creating GT training on the state level, 4) addressing specific needs for students with learning difficulties, for economically disadvantaged, and for minority populations, 5) developing research-based and project-based activities and programs to support GATE, and 6) creating communication among higher education and GATE educators. The Marland Report's recommendations further promoted GATE as a necessary part of the educational system to serve GT students as well as creating more equity.

In 1974, the Unites States Department of Education (USOE) established a new entity, The Office of the Gifted and Talented, to specifically support GATE. Although the Office of the Gifted and Talented was created and part of the USOE, no additional formal federal legislature addressing GATE was implemented until after *A Nation at Risk: The imperative for educational reform* was presented by the National Commission on Education in 1983. *A Nation at Risk* (1983) stated that US students were not performing at the same standard of excellence as counterparts in other parts of the world. This report generated awareness about methods for increasing awareness and understanding of GT students' unique classroom needs while also increasing their academic expectations (Ford, 2012). A few years later Congress adopted measures to address GATE via The Jacob Javits Gifted and Talented Students Education Act in 1988 as a Reauthorization of the ESEA with a focus on GT teacher education, low socioeconomic GT students, and

underrepresented GT minority groups (Ford, 2012).

In order to facilitate the Javits Act, the National Research Center on the Gifted and Talented (NRC/GT) was established in 1990. The purpose of the NRC/GT was and continues to be, to conduct research regarding the identification of and appropriate programming for GT students by seeking out successful research-based strategies that educators can easily receive and implement for their GT students while simultaneously being aware of the need for policymakers to see practical uses for educational strategies the NRC/GT suggests (Renzulli, et al., 2014). Renzulli et al. (2014) states that the Center focuses on "product development" and "product dissemination" in various areas for educator and parent resources. Ultimately, their purpose is serving GT students and those who support them through current, valid research methods.

Another report, *National Excellence: The case for developing America's talent* (1993), stated that America's students with the highest abilities and talents are neglected addressing suggestions for their appropriate identification and educational care. *National Excellence* also modified the definition of giftedness to remove "psychomotor ability" from the 1972 version of giftedness, but added a more equitable "focus on talent, talent development, potential, and making comparisons based on students' experiences and opportunity or lack thereof" (Ford, 2012, p. 85).

The next policy change occurred in 2002 with the No Child Left Behind Act (NCLB) which "passed as the reauthorization of ESEA" (Ford, 2012, p. 85). NCLB incorporated and expanded version of the Javits Act allowing for availability of "statewide grants" (Ford, 2012, p. 85). However, NCLB focused heavily on filling the academic achievement gap for those not meeting minimum educational standards. This

shift in focus caused a negative trickle-down effect of sorts for the GT population. Educators, under pressure from state and federal guidelines, could no longer spend time, energy, or resources on GATE as they were allowed in the past (Beisser, 2008). Luckily, the tides have turned once again in the ever-changing cycle of education with the passing of new legislation.

Federal GATE Policy

The NCLB was revised in 2015 to become Every Student Succeeds Act (ESSA). ESSA is the current federal legislation that addresses U.S. education, including the identification of and education of gifted and talented students through the Jacob K. Javits Gifted and Talented Students Education Program (ESSA, 2015). Most recently updated on January 28, 2020 and enacted in December 2019, section 4644 of ESSA provides for multiple facets of GATE "supporting high-ability learners and learning". This section of ESSA (2015) explains the purpose and details of the "Jacob K. Javits Gifted and Talented Students Education Program" explaining the process of applying for and usage of funds to be dispersed:

> to promote and initiate a coordinated program…of evidence-based research, demonstration projects, innovative strategies, and similar activities designed to build and enhance the ability of elementary schools and secondary schools nationwide to identify gifted and talented students and meet their special educational needs (p. 288).

ESSA continues to support practical research through the National Research Center for the Education of Gifted and Talented Children and Youth (NRC/EGTCY) by providing grants to entities that apply to, and adequately explain how they will identify GT

students, how their GT programs or curricula will benefit GT students as well as have the potential to aid other students where applicable. Included within the application proposal should be plans to denote how their GT program will be assessed. Additional aspects of possible uses of Javits grant funds are the initiation and development of innovative programming strategies for GT students, the creation of opportunities for lower-income students and at-risk students, and the identification and education of "students who may not be served by traditional gifted and talented programs" (ESSA, 2015, p. 288). All applications to request Javits funding are peer-reviewed. Those administering and coordinating programs must hold appropriate credentials and have experience in GATE. As states decide their methods and procedures for identifying and educating their GT students, there is potential to undertake inventive strategies and engaging programs to meet their unique needs.

State GATE Policy

At the state level, Chapter §1.002 of the Texas Education Code (TEC) states that all Texas students will be provided an equal education and that special education students are to be provided for. GT students are protected under the special education department. Special education for a GT student will, more often than not, look very different for a special education student who has learning difficulties or for a GT student who is twice-exceptional, having both a learning challenge and a "potential for high achievement" (NAGC, 2020). Appropriate and necessary education tailored for this type of student is not only expected, but it is also required by law. (Texas Education Agency, 2020).

As an overview of general policy, the TEC, §4.4 states that "a well-balanced and appropriate curriculum will be provided to all students (TEC, 2018).. Through that

curriculum, students will be prepared to succeed in a variety of postsecondary activities, including employment and enrollment in institutions of higher education" (TEC, 2018). Furthermore, TEC §4.7 says that "the state's students will demonstrate exemplary performance in comparison to national and international standards" (TEC, 2018). When GT students are motivated, challenged, and guided toward their potential with a trained educator, it seems logical and more likely that GT students will excel, therefore, achieving quality academic success (Reis & Renzulli, 2010; Renzulli, 2012). More specifically GT students and programming are provided for via TEC §29.121 as it denotes gifted and talented characteristics, via TEC §29.122 as it mandates districts to create identification policies and procedures, via TEC §29.123 as it mandates districts to develop, maintain, and implement a plan for GT student guidance, and via TEC §29.124 as it mandates that districts must report that their GT plan is in accordance with the state plan created under §29.123. (Texas Education Code, 2018). The current Texas State Plan for the Education of Gifted/Talented Students was revised April 2019 including the Texas Performance Standards Project (TPSP). Established by TEC §39.236, TPSP is provided as the main tool for assessing gifted services (TEA, 2020).

All of these policies are only as useful as the administrators and educators who ensure the directives are carried out with fidelity. Under the guidance of practical school leaders, GT educators contribute to stimulating, differentiated GT learning opportunities to extend GT students' high-level thinking skills. As job skill requirements constantly change, preparing GT students by allowing practice employing critical thinking, technology savviness, collaboration, decision making skills, creativity, adaptability/flexibility, data literacy, emotional intelligence, cultural intelligence, self-

motivation, prioritization, time management, stress management, and learning from mistakes are going to be indispensable tools GT students need to be equipped for their near future (Marr, 2019).

Need for GT Programming

Reis and Renzulli (2010) posed the question "Is there still a need for gifted education?" and set out to discover their answer. After analyzing numerous GT research studies, they found that GT programs are beneficial to high achieving students for several reasons. An overarching reason for designing effective GT programs is to create an environment tailored to the unique needs of GT students (Ford, 2018; Reis & Renzulli, 2010; Renzulli, 2012; VanTassel-Baska, 1998). Reis and Renzulli (2010) found that GT students' needs remained unmet within regular classes because they did not have access to accelerated, challenging, interesting, real-world problem-solving tasks to remain motivated, engaged and academically succeeding, therefore, GT teachers must be trained to differentiate for high achieving students as well as struggling students (Reis & Renzulli, 2010).

GT strategies have been positively associated with increased academic achievement with high ability students of varying ethnic backgrounds and socioeconomic situations. Studies also show a positive, long-term impact on student productivity, interest development, academic success, creativity, college preparation and future employment (Ford, 2010; Ford, 2018; Reis & Renzulli, 2010). Kim (2016) analyzed twenty-six studies that involved giftedness and found "positive effects of enrichment programs on gifted students in terms of academic achievement and socioemotional development" (p.114).Without appropriately motivating GT services, identified GT students,

underserved GT students, and future GT students would be negatively impacted which could lead to students potentially opting out of current GT programs, dropping out of school, and lower academic achievement (Reis & Renzulli, 2010).

As noted via research, gifted students need appropriate, challenging educational offerings to grow their potential abilities. This is not simply a suggestion or a good idea; it is an educational requirement. Providing educational opportunities to GT students is denoted in both federal and state law. According to the most recent US federal policy, ESSA provides for funding to specifically support GT students through the Jacob K. Javits Gifted and Talented Students Education Program, which will be referred "The Javits Program" from this point forward within this document (USDE, 2019). This federal program offers funding for programs and research that will directly benefit gifted and talented education (GATE) through products, strategies and other resources with special attention placed "on serving students traditionally underrepresented in gifted and talented programs, particularly economically disadvantaged, limited English proficient (LEP), and disabled students, to help reduce the serious gap in achievement among certain groups of students at the highest levels of achievement" National Research Center for the Education of Gifted and Talented Children and Youth will administer the Javits Program (USDE, 2019).

Each state, school districts, charter schools and private schools have much freedom to design their specific program design to fulfill policy mandates. This flexibility is one of many variations within the realm of GATE that often causes confusion at multiple levels. Directly related to the confusion in the field of GATE are the variations regarding who is gifted as well as how GT programs are designed (Kaul & Davis, 2018).

In Texas, the most current federal and state legislature is reflected in the Texas Education Code (TEC) and administered by the Texas Education Agency (TEA). Texas' current state goal clarifies which students the TEC provides for:

> Students who participate in services designed for gifted/talented students will demonstrate skills in self-directed learning, thinking, research, and communication as evidenced by the development of innovative products and performances that reflect individuality and creativity and are advanced in relation to students of similar age, experience, or environment. High school graduates who have participated in services for gifted/talented will have produced products and performances of professional quality as part of their program services. (TEA, 2019)

In order to provide students GT services, a student must be referred to GT leaders, coordinators, or specialists to screen referrals for identification. There are multiple factors that play into this process and the health of a GT program can be determined in part by examining a school district's GT identification process. The identification process begins with an educator or a parent referral after they notice above average ability or performance in a child or adolescent. District determined assessments in compliance with the state plan are used to gather quantitative evidence and/or observational data about the child's behaviors that may indicate a need for GT services (19 TAC §89.1). In Texas, this process begins in kindergarten and can be performed through twelfth grade. (TEC §29.122, 19 TAC §89.1(3)). Teachers, parents, and the student contributes to the collection of qualitative and quantitative data about a referred student.

In Texas "multiple sources for each area of giftedness" are used to determine

whether a student qualifies as GT (19 TAC §89.1(2)) by a committee of three or more educators with appropriate GT training ((19 TAC §89.1(4)). Appropriate training is defined as completing an initial thirty hour training and each following year completing a minimum of six hours of GT update training (19 TAC §89.2 (2-3)). Once the committee decides eligibility of a student into the GT program, their services are to begin. If a student is not decided to be eligible, parents can appeal the committee's decision (TEA, 2019). Unfortunately, while there is a logical process in place to identify GT students, there is a disconnect that must be discussed. The health of GT programs reflects a similar illness throughout the United States.

Concerns and Implications for Underrepresented Students

Reflecting back, researchers Flieger and Bish (1959) stated a shift was occurring in GT trends toward "recognition and determination to realize the underdeveloped human resource potential among members of the lower socioeconomic groups, Negroes, and women" (p. 408) immediately after the publication of the National Defense Education Act of 1958 (NDEA). Unfortunately, their hopeful announcement continues to remain unfulfilled as the disparagement between what should be and what is has yet to be achieved more than sixty years later. If this was the cry of educational leaders six decades ago, what is the roadblock that prevents those in the US educational system from finding plausible solutions to the persistent issue of identifying students more proportionally? Why is the educational system still so far from the mark when it comes to meeting the needs of students with gifts and talents?

If society, education, and academia choose to ignore the disproportionality of ethnicities of GT students, in essence, each would be resolving that White children are

definitively more gifted than other groups of children perhaps by genetics. But society, education, and academia do realize there is a problem, and the data cannot be ignored. Underrepresentation of multiple ethnic groups is the norm rather than the exception. Even though it seems to be the norm, that does not mean that is acceptable. The causes for the lack of minority GT students and the small number of GT students from low-income situations are under investigation. Ford (2010) names three prevailing factors that prevent minority students from being identified as GT: deficit thinking, colorblindness, and White privilege. Ford (2010) states that these three mindsets foundationally prevent educators from recognizing current or potential giftedness or talent in a minority student because they may believe those students to be less than capable; believe they, as educators, are treating all students fairly by looking at all students objectively rather than in context of their culture and situation; and give White students advantage by default through the education system's structure, assessments, policies, etc. resulting in fewer teacher referrals of minorities to GT programs. However, studies have not yet been able to definitively root out all of the exact causes for the disproportionality of minorities and low socioeconomic status (low SES) GT students that lead to lower number of teacher referrals of students from minority and "economically disadvantaged" groups (Card & Guiliano, 2016, p. 13683).

Students concerns that likely contribute to fewer teacher referrals are poor scores on cognitive assessments, poor grades, lack of access to resources, educational programs or services, low educator expectations, high mobility rate, higher poverty level, sub-par schools, under trained educators, negative peer group influences, among others (Subotnik et al., 2012). This is not a comprehensive list of possible causes for a lack of

identification and/or participation in GT programs and services. Unique student living situations, lack of parental understand or support, and many other related issues could prevent students from experiencing academic success and therefore, be passed over when teachers are looking for gifted behaviors. Based on multiple studies, it is obvious that the process of GT identification requires modification to become broader and more culturally aware.

GT Identification

In order to even begin identifying students as GT, an educational entity, such as a school district, must define the criteria by which students will be identified. At the crux of GT identification is the definition or description of characteristics that a GT student should possess to be considered to qualify for a local GT program. While the definition of gifted and talented or giftedness has morphed over time, most definitions are quite similar (*STATE DEFINITIONS OF GIFTEDNESS*, NAGC, 2013). Not surprisingly, in the US, each state and/or school district has autonomy to design their own GT program as long as it is in compliance with federal law. Yet, if state definitions are more similar than different, why do the gaps between White student populations drastically outnumber other student populations across the nation? What must change in order to assess giftedness using a more equitable method?

Research focusing on GT identification states that the gap between White students and other ethnic populations has not been significantly reduced in general over time (Card & Giuliano, 2016; Ford & King, 2014; Kaul & Davis, 2018; Subotnik et al., 2017). So, what bridges this never-ending identification gap that essentially closes the door on minority students? Several researchers support recommendations of a broader definition

and understanding of student gifts and talents to allow for a wider range of potentially gifted student identification (Callahan, 2005; Ford & King, 2014; Ford et al., 2018; Renzulli, 2012; Subotnik et al., 2012; Subotnik et al., 2017). In addition, several research studies suggest that education must identify GT students based on a larger umbrella of GT characteristics and areas of potential giftedness or talent (Callahan, 2005; Ford et al., 1997; Reis & Renzulli, 2010; Renzulli, 2012; VanTassel-Baska, 1998). More specifically, Ford et al. (1997) and Ford (2010) advocate for a more culturally relevant definition of gifted and talented as well as more "reliable instruments" to encompass more underrepresented students (2010, p. 206).

None of the research studies cited in this chapter advocated for continuing traditional identification assessment measures that focus mainly on cognitive assessments or quantitative data alone. Instead, Ford (2010) and Callahan (2005) agree upon the necessity for "valid and reliable tools" (Callahan, 2005, p. 101). Universal screening assessments designed to be more culturally inclusive show potential for identifying more Hispanic and Black students as compared to the traditional teacher referral method, and therefore, is a desirable tool for future GT identification (Card & Guiliano, 2016; Ford et al., 2018). When analyzing qualitative and quantitative evidence of potential gifted student behavior, Ford et al. (2018) recommends a diverse GT committee.

Perhaps the combination of close examination of current identification processes to evaluate assessment tools to determine their validity in conjunction with culturally aware educators who actively seek to know their students' cultural context along through a broadened definition of giftedness in multiple areas of potential can bridge the longstanding gap that has left minorities outside of GT programming for too long. If

educators are taking the time to invest in their students relationally, contextually watching out for signs of talent with a positive, "half-full" attitude about all students' giftedness, perhaps the gap between all groups of students will become more reflective of the overall student populations.

GT Theories

The field of GATE is rather young, just beginning to take ahold in the 1970's (Hunter, 2001). The traditional belief guiding who is identified as GT rests on IQ scores, cognitive abilities, and academic achievement. However, Renzulli (2012), an anchor and advocate of the GT community, previously posed a new way of perceiving giftedness through the Three-Ring Conception of Giftedness Theory that pushes GT paradigms beyond the boundaries of traditional understanding and states gifted behaviors include above average ability in an area, high task commitment in an area of interest, and creativity. Renzulli (2012) later introduced The Enrichment Triad Model (ETM) to be incorporated into GT program services that encourages students to explore, actively acquire, and practice applying knowledge in a topic of their interest. This learning process is inductive and student-driven, facilitated by GT educators. The end goal of his three-part ETM is a high-quality product or performance based on a student's newly acquired knowledge and skills with real-world application as well as an authentic leadership action that springboards from what they learned.

Another major theoretical contribution to the GT program conceptualization is the belief that GT services must nurture more than academic aspects of education; it should guide GT students' co-cognitive traits such as optimism, courage, passion, sympathy/empathy, physical/mental energy, and vision/sense of purpose to guide them

toward wisdom (Renzulli, 2012, Renzulli et al., 2006). Operation Houndstooth is the name of the model that focuses on developing social capital through the cultivation of co-cognitive abilities (Renzulli, 2012; Renzulli et al., 2006). A fourth theory presents the idea that GT programs should foster executive functions such as self-control, persistence, optimism, and social intelligence to allow students to carry out the tasks that they are interested in learning, practicing, and performing/producing an unique and novel end result (Renzulli, 2012). These theories have cast new light on GT programs to offer positive, motivating, non-traditional methods by which GT students can be served.

Renzulli (2012) separates traditional academic "school-house giftedness" from non-traditional inventive "creative productive giftedness" by stating that a student can possess both but does not necessarily (p. 151). This perspective transformation from an "old school" empirical view to a more creative and open-minded view of giftedness, appeals to many. A large number of researchers call for a shift toward talent development which focuses on cultivating students' potential gifts and talents (Callahan, 2005; Feldhusen, 1996; Ford, 2010; Ford & King, 2014; Ford et al., 2018; Reis & Renzulli, 2010; Renzulli, 2012; Subotnik et al., 2012; Subotnik et al., 2017; VanTassel-Baska, 1998). Under this type of growth mindset, educators can provide much needed opportunities to challenge more students. By developing potential talent, minority students are more likely to be allowed into GT programs and can be engaged in rigorous learning to propel them forward and increase options for their future careers (Feldhusen, 1996; Ford & King, 2014; Ford et al., 1997; Ford et al., 2018). A GT learning experience devoid of challenge is often discouraging to a GT student and can lead to underachievement and potential dropping out of the GT program or even high school

while intentionally challenging experiences provided to GT students often motivative them to excel (Reis & Renzulli, 2010).

GT Best Practices

Healthy enrichment programs have been shown to positively affect academic and social emotional growth via the guidance of a caring, well-training GT educator who provides rich, rigorous learning opportunities for their GT students, through parental support, and through students, and mentors (Brigandi et al., 2018). Experts suggest multiple methods of designing positive learning experiences. Feldhusen (1996) gives GT educators six strategies for developing talent including committing oneself to discovering talent, structuring opportunities to exhibit potential talent, recognizing and praising observed talent, guiding students in goal setting, providing resources for student talent practice, and communicating emergent talent with parents. These basic methods allow for flexibility of design for GT learning opportunities and yet, remain student focused. Several studies recommend student-directed investigation, research, and practice in order to internalize experiences as they produce, perform and lead others in high interest areas (Feldhusen, 1996; Kim, 2016; Reis & Renzulli, 2010; Renzulli, 2012).

Another aspect of a healthy GT program is differentiated learning opportunities. One way to differentiate is through pacing. Accelerated learning options should be offered to GT students (Reis & Renzulli, 2010; Renzulli, 2012). However, with the mindset of talent development in mind, GT educators should meet GT students where they are and guide them from that point as fast or as slow as needed to grow their talent, confidence, and other executive functions (Feldhusen, 1996; Kim, 2016; Renzulli, 2012). Often related to the acceleration of learning is incorporating advanced learning through

curriculum enhancement (Reis & Renzulli, 2010) to create rigorous experiences. Enrichment programs benefit diverse populations and twice exceptional students as "over 80% of those who underachieved reversed their underachievement when provided with challenging enriched learning opportunities in areas of interest" (Reis & Renzulli, 2010, p.316). Ford (2010) supports this statement by summarizing a logical learning progression to describe effective GT services: "When curriculum is rigorous and multicultural---culturally responsive---then more Black and Hispanic students will be engaged and motivated. With engagement and motivation comes performance; with higher performance or achievement comes greater representation in gifted education" (2010, p.35). There is such hope for change in this statement.

However, students who come to school with less practice at home will need more practice in the classroom using skills that will benefit them long-term such as study, time-management, and test-taking skills; rich, effective learning opportunities and strategies to succeed within those experiences (Ford et al., 1997). Subotnik et al. (2012) states that "what determines whether individuals are gifted or not is not *who they are* but *what they do*" (p. 180) so the more students have the opportunity to practice, the better off they will be supported by studies recommending enrichment begin at an early age and continue (Ford et al., 1997; Reis & Renzulli, 2010; Renzulli, 2012). As theory and pedagogy occur simultaneously (Ladson-Billings, 2014), GT students have the opportunity to gain knowledge, practice applying that knowledge, improve their cognitive and co-cognitive skills, and put their knowledge and skills into action as they become dynamic agents of change in their local or global world (Renzulli, 2012).

Social Emotional Support.

Intertwined in the GT learning process are the social and emotional needs of GT students. Multiple studies show a positive correlation between enrichment programs and students' social-emotional growth and experiences (Brigandi et al., 2018; Ford et al., 1997; Kim, 2006; Renzulli, 2012; Renzulli et al., 2006; Subotnik et al., 2012). While all students benefit from social-emotional learning, minority students stand much to gain from social emotional learning in order to mitigate negative perceptions of intelligence and their role in GT (Ford, et al., 1997; Ford et al., 2018) as well as to promote positive self-image/attitude, self-efficacy, relationship building, tenacity, less mental and emotional stress, increased academic achievement, less negative criminal behavior, increased citizenship activity, increased potential for graduation, college readiness, and career preparation among others (Gay, 2018). Experience fine-tuning or acquiring social and emotional skills is possible within the context of student driven learning experiences.

When GT learners are allowed to participate in student directed learning such as project-based learning (PBL), GT students interact to evaluate real-world scenarios that require higher level thinking. GT students are able to practice and cultivate their social-emotional skills as they collaborate and communicate with others to evaluate, design, adjust, and create a product which is quite similar to an engineering process and applicable in practical situations later in life (Design Squad, 2018) and for Black students may increase "social and academic motivation and increased learning in cooperative/communal learning settings" (Jagers et al., 2019). Problems arise daily without warning. The ability to manage difficulty and use that difficulty, from personal mistakes or outside circumstances, to one's advantage by growing from it, teaches resilience. "Growth happens in the valley, not on the mountaintop" (Bledsoe, 2020).

Students who take risks and bounce back from less than perfect situation to try again to find a solution to a problem.

Through PBL and other collaborative activities, students are able to find a common goal or work toward a common purpose. This team mindset is a valuable asset in many workplace and higher education environments. Increased engagement during collaborative processes has the potential to increase academic achievement (Ford, 2010). Incorporating collaboration within GT learning experiences offers all student populations opportunity for building their academic, social, emotional capital (Jager et al., 2019; Reis & Renzulli, 2010; Renzulli, 2012). This concept can be extended to the mentor-student relationship.

Extension: Collaborative Goal Setting with GT Students.

Designing meaningful and inclusive GT identification strategies, providing appropriate, challenging learning opportunities, fostering social skills needed for future career and/or higher education, and nurturing giftedness and talent potential are all the responsibility of the educational system because GT students do not have the same needs as other students (Reis & Renzulli, 2010; Subotnik et al., 2012; Subotnik et al., 2017). When we ignore GT student needs, we do students a disservice (Callahan, 2005; Ford, 2010; Ford et al., 2018). Just as students in special education do not fit into the mold of an average student and require accommodations to meet educational needs, neither do GT students. If GT students are continually left out through conscious or unconscious means, especially minority students, perhaps new accountability measures should be enacted to require documentation as proof of individual student goal setting that include the students' input. Individual Education Program forms document and outline specific goals

for special education students to achieve and for their teachers to follow to help them achieve academic and behavior success (Texas Education Agency, 2020) so a similar procedure could be adapted and modified to facilitate GT educator and student collaborative short and long-term planning. In order to establish this collaboration, GT educators must know their GT students well.

A practical application of best practices in GATE that depend heavily on CRP is collaborative goal setting sessions among GT teachers and GT students. Individualized educational plans (IEP) are required for special education students, but they are not required for GT students. It would make sense to design individual goals for enriching GT experiences to help GT students plan for and achieve their educational potential whether through performance or product (Callahan, 2005; Renzulli, 2012). By developing a collaborative individual goal plan for a GT student with the GT student as an active participant, GT leaders can guide students toward academic success during their educational career. Perhaps GT students who participate in designing their own unique goal plan can feel empowered through creativity, leadership, or academic content area of expertise in turn driving their educational course of action toward the pursue their passions. This type of discussion and collaborative goal setting plan design could be provided to any student and guide any student along their educational path using culturally responsive pedagogy (CRP) and a genuine knowledge of a student's interests (Gay, 2018).

GATE through the lens of Culturally Responsive Pedagogy

Humans do not learn in a vacuum. People's experiences shape them as they move through their life journey. In the beginning, young people grow up in a specific

environment with both overt and hidden rules created by parents or guardians, society, and their own personal internal dialogue. GT students are no exception. A gifted young person may face awkward circumstances if they may not quite fit into the mainstream of their home culture due to their giftedness. In some circumstances exceptionally intellectual minority students may be perceived as acting "above others", "acting White" or "selling out" (Gay, 2018), and yet, they may be considered an expert within their own culture due to their giftedness (singing, art, leadership). This is a contradiction that high ability Black students face and struggle with (Gay, 2018). Each student attends a physical or virtual classroom with a unique collection of life experiences. Effective educators make intentional attempts to lean into their students' experiences and cultures in practical, meaningful, and genuine ways to connect students to the academic education as well as to their social education (Banks, 1999; Gay, 1995; Ladson-Billings, 1995). Experts point out the need for educator attention on simultaneous pedagogy and practice (Ladson-Billings, 2014; Renzulli, 2012). Culturally aware educators make every effort to meet the academic needs of all students while respecting and uplifting each child's unique culture (Ladson-Billings, 2014).

Because GT students come from various backgrounds, it is vital to actively engage culturally relevant teaching (CRT) practices to provide classroom experiences that connect academic thinking and content directly to a student's culture. For example, Ladson-Billings (1995) states that sociologists believe that incorporating a student's home language into the school environment will allow those students to achieve more academically. In essence, students who are able to connect their own experiences to academic content via familiar language create a relational bridge between their culture

and required content, not merely in words or by the addition of a few multicultural books or artifacts added to the classroom environment (Gay, 2018; Ladson-Billings, 2014). Each connection is unique to each person due to their own experiences. Using CRT, effective educators identify student's strengths, and then nurture those strengths leveraging them toward an academic interest the students choose (Renzulli, 2012). An effective teacher cultivates intrinsic motivation in their students.

In addition to growing students' individual strengths and academic pursuit, educators using CRT ensure their students' culture remains intact, not sacrificed on an altar of systematic education. One of the main purposes of the educational system is to prepare students to be functional members of society. To that end, it is education's responsibility to provide practice in critical thinking and analysis of the current state of a given situation. If students are allowed to practice "critical consciousness" (p. 162) as Freire theorized, then they will be better equipped citizens (Ladson-Billings, 1995). Educators must be provided with opportunities to self-reflect and analyze personal beliefs, so they create capacity within themselves to seek change (Gay, 2018). Seeking and acquiring personal and professional change begins with relating to their students. Educators must be provided training that equips them to effectively connect with students in a culturally sensitive, respectful manner (Ford, et al., 2018; Gay, 2018; Ladson-Billings, 1995; Reis & Renzulli, 2010).

Becoming an effective educator requires proper training and education. To be equipped as a culturally relevant educator also requires teacher education and on-going professional development (Ford et al., 2018). Gay (2002) presents five CRT necessities educators should employ during their profession and in their classroom that produce

environments ripe for cultural awareness and growth. Gay states that culturally critical educators must be prepared to teach multicultural students by knowing "*explicit knowledge* about cultural diversity" (p. 107). After teachers gain a solid understanding of diversity in a content area, they should design culturally relevant curriculum to include various ethnic populations through formal, symbolic, societal curricula. A well-rounded foundation for teaching multicultural curriculum includes facts, concepts, and generalizations (Banks, 1999). Building a nurturing classroom environment between teacher and students as well as among all classroom participants is another foundational aspect of CRT. In preparation for nurturing such an environment, educators must understand various communication techniques for various ethnic groups to facilitate effective and respectful communication while still accurately conveying information. Gay (2002) calls this "multicultural communication competency" (p. 112). Finally, culturally relevant educators look for ways to address diverse cultural needs with the method of content delivery, matching effective activities with the needs of various learning styles.

These skills are developed over time but should be initiated in teacher education programs for pre-service teachers to prepare more effectively for multicultural classrooms (Gay, 2002). Banks (1999) further outlines ways to develop a multicultural curriculum and deliver its content by first identifying key concepts and generalizations to be taught, and then designing appropriate teaching strategies and activities that promote inquiry and thinking skills. Many teachers may not have information regarding this mindset of teaching when they begin the teaching profession. However, these are skills acquired over time through much awareness and practice (Gay, 2018).

As more educators understand CRT practices, they may be more equipped to

recognize giftedness across ethnic groups in a classroom or on a school campus. Giftedness may look very different in one culture compared to another. It is extremely important to identify giftedness in all ethnic populations. This is a discussion some may not wish to pursue. However, underrepresented GT students deserve an equitable education by law and by common sense. If we are educating youth to be active members and leaders of our society (Ladson-Billings, 1995; Fliegler & Bish, 1959), it makes sense to develop all of the human capital we can find. Cultural differences may prevent awareness of particular gifted behaviors. Those educators who nurture a culturally diverse classroom and/or campus provide environment(s) that cultivate giftedness that may have been hidden due to lack of cultural understanding including underrepresented students.

Gay (2013) states that "beliefs and attitudes always precede and shape behaviors" so it is wise to "examine teacher beliefs before instructional actions (p. 49). James Reeves confirms this theory when he states, "Short-term change can be accomplished without belief change. However, long-term change requires a change in belief" (p. 53). For an educator, this means that if an educator believes all students can achieve and experience success, they will choose actions that prove their belief. For example, if a teacher believes their students can be successful at reading, they will seek out multiple ways to address the needs they may have such as: remediation for gaps in learning, reading practice, comprehension discussions, etc. In a GT classroom, if a teacher believes their students are capable of being academically or philosophically challenged, they provide higher level thinking activities to encourage critical evaluation within scenarios, ethical debates, team building tasks or projects with regard to various concepts or real-life

problem solving with original or unique student-created products (Renzulli, 2012). While these examples are possible and realistic, they are also limited to the educator's belief of their students' abilities. An educator who implements CRT practices with fidelity must believe their students are capable of growing academically, socially, introspectively, and interpersonally in order to allow the freedom and self-direction required for cognitive challenges such as those listed above.

In order to create a culturally relevant environment in general, educators must make intentional decisions about their own behaviors and the interactions occurring among all members of the classroom. Educators who build authentic relationships with their students (Cole et al., 2016; Gallivan, 2017; Milner, 2011), create collaborative learning environments for themselves and others, and take on personal responsibility to teach all students with best practices, lay a fertile foundation for CRT (Milner, 2011). When a teacher genuinely pursues and acquires a deeper understanding of students' cultural backgrounds through listening and discussion, they can incorporate their newfound awareness into essential academic concepts. Culturally relevant teachers create an inclusive classroom that allows students to grow closer to the teacher and the students to grow closer to each other (Milner, 2011).

When educators explicitly open communication to address ethnic differences and individual differences, students are empowered to avoid stereotyping others by using their new awareness (Cole et al., 2016) allowing students to rethink pre-existing assumptions. It is necessary to employ CRT in GT classrooms in order to allow students' giftedness and talent to flourish (Byrd, 2016). According to Renzulli (2012) providing students freedom to explore a topic they are passionate about is a key ingredient in

growing their giftedness. Imagine how much a student's understanding of their own value could potentially expand when offered culturally and socially relevant methods to connect their personal passions to their personal experiences. Perhaps a student's passion takes on a new life of its own by morphing into a community project or non-profit when aided by culturally relevant practices within the GT classroom. Flieger and Bish (1959) said the goal of nurturing GT students is to produce high functioning active members of our democratic society. This goal has not changed.

Significance of CRP in GATE

It is the hope of the researcher that more underrepresented ethnic groups are more easily identified as GT using CRP. This type of pedagogy has the potential to be a mechanism that allows educators' self-awareness to become a tool that fosters much insight for positive change within themselves and their classrooms. Every teacher, regardless of grade level or content taught, should be cognizant that each culture nurtures ranks some character strengths with different amounts of importance such as looking down to avoid eye contact as a sign of respect for some Middle Eastern and Asian cultures for example (*Body Language and Personal Space*, 2017).

Understanding how certain people groups view useful character strengths requires cultural training to provide a valid understanding of multiple people groups in a school district's population (Banks, 1999). An example of campus-wide CRP would be a local school having authentic conversations with community members to gather accurate and informative cultural training for local educators. These personal connections could create an ongoing collaborative initiative and build trust and understanding between the two entities. This practical collaboration simultaneously benefits students, their community

and the educators who serve them. Using this scenario, if local educators gather contextual information to increase their understanding of a people group that attends their campus, those educators are able to see into the lives of that group of students in a new way. Now local teachers are better equipped with knowledge and a deeper understanding of that population's values, needs, and barriers to learning, if any. It is up to the newly educated teachers to use their insight to connect those students to their learning in more relative and meaningful ways. Teachers who have good intentions of teaching diverse student populations more effectively will need to move beyond themselves and embrace new ways of engaging all student populations in academic learning if they are committed to CRP (Gay, 2018).

With that example in mind, imagine how much more effective those local teachers could be at identifying giftedness in that student population. The educators' new knowledge of the student population, context of their situation, insights into their personal culture, and various other information about their beliefs and values all factor into a new frame by which those educators can "see" that student group. Giftedness in minority populations may appear in non-traditional performances such as storytelling or motivating others, but once identified may spark increased self-efficacy (belief in one's abilities) as they experience success through rigorous and relevant learning challenges (Feldhusen, 1996; Gay, 2018; Ladson-Billings, 1995). Educators must be given the training needed to address unique GT needs especially those of "gifted students from traditionally underserved, underrepresented populations" (Kaul & Davis, 2018, p. 166).

Preparing educators for the vital work they do in the classroom requires specialized training. Educators must be provided adequate training to acquire self-

awareness, content, and implementation strategies. There are two types of educators that are of concern in this section: pre-service teachers and in-service teachers. Both types of educators' needs have similarities and differences. The following section will attempt to provide examples of researched-based best practices for both types of educators. Practical and appropriate teacher education is necessary to effectively equip pre-service teachers as they prepare to enter the classroom. Current educators and other stakeholders need on-going and relevant professional development opportunities to remain updated on innovative and newly researched strategies in order to best support students as well.

GT Teacher Education and Professional Development

Before delving into specifics of best practices in pre-service teacher education (TE) and in-service professional development (PD), it is important to understand a basic principle of humanity that says each person's actions are based directly upon their individual conscious or unconscious beliefs. Reeves (2009) states, "Every action is preceded by a thought. Every behavior is based upon belief. In other words, we act out of what we believe" (p. 53). Gay (2013) states that "beliefs and attitudes always precede and shape behaviors" (p. 49). Gubbins, Callahan & Renzulli (2014) and Ladson-Billings (1995) explain that teacher perceptions, assumptions and beliefs directly affect their instruction and behaviors within the classroom. This is a professional concern that must be addressed on an individual level with critical self-reflection. If a teacher is unaware of their beliefs or assumptions about student learning, they are not likely be aware of their behaviors, nor any positive or negative effects that their behaviors, including words or tone, may have on student learning or on their relationships with others (Gay, 2018).

Therefore, in order for TE or PD to influence educator actions toward awareness,

teachers must be provided self-reflection opportunities to assess what they do and don't believe (Howard, 2003; Ladson-Billings, 2014). School leadership must also examine themselves to identify any assumptions or unconscious biases that may exist that could inadvertently cause division or create negative relationships among campus stakeholders (Eberhardt, 2020; Kalifa et al., 2016). Based on this understanding, critical self-analysis should be embedded within campus culture or specific critical TE or PE to provide opportunities for self-awareness. Self-awareness brings about personal insight and allows for the possibility of change within teacher and leader mindsets. Once educators and educational leaders are cognizant of their own beliefs, biases, and assumptions, TE and PD provide more effective avenues for personal and professional growth that would not necessarily be possible prior to critical self-reflection and hopefully, a new-found growth mindset (Howard, 2003).

Best Practices in Teacher Education and Professional Development

Both TE and PD must be relevant to the needs of the teachers attending the learning experiences. It would be logical to surmise that research-based recommendations made for pre-service teachers have the potential to be generalized to in-service teachers through PD if they are shown to be best practices. Hammer (2013) outlines best practices in designing PD to include appropriate content pedagogy, aligned PD objectives, active engagement, inclusion of multiple participants from the same professional learning community (PLC), and continual practice of implementing new concepts to create effective PD. To clarify further, a PD's purpose and objectives must be clearly communicated. In addition, educators must be interested enough in the training to actively participate so that they are encouraged to practice their understanding or

implement the strategies acquired to prove their understanding. Teacher perspectives are noted to be essential in determining what is useful or engaging (Warford et al., 2013).

In-service teacher perspectives regarding professional development indicate a desire for practical professional development based on the many different levels of teachers' classroom experience and dictate varying needs for scaffolding during PD. New teachers will need more examples, questioning, and procedural strategies to assimilate new concepts being taught, while veteran teachers may need collaboration regarding the same concepts but little scaffolding (Warford et al., 2013). Warford et al. (2013) also noted that both new and veteran teachers reported a need for this differentiation in the "selection, implementation, and follow-up" of PD not simply one aspect of PD (p. 109). Warford et al. (2013) and Hammer (2013) agree that teachers need active participation and extended amounts of time to authentically practice new concepts in meaningful ways.

Strategies that teachers stated as important were "chunking" new information into smaller parts, allowing teachers an immediate opportunity to implement the new information, and discussing their experience with other educators to "exchange ideas about what worked or what needs to be refined" (Warford et al., 2013). The latter strategy of collaborative discussion affords educators from all levels of experience a forum to express their successes and concerns to others who have a common goal of effective implementation. By the end of an effective PD learning experience, educators should be able to make applicable connections between their new learning and their own classroom and/or sphere of influence.

GATE Teacher Education and Professional Development.

Just as educators and school leaders should evaluate their beliefs and assumptions

and biases in general, they should also critically examine their own beliefs regarding GT students and their ability to provide appropriate educational experiences for them (Matheis et al., 2017; Seigle et al., 2010). In a cross-country study, Matheis, et al. (2017) discovered pre-service teachers were most apprehensive about their ability to effectively teach GT students as their research "suggests that pre-service teachers do not consider themselves able to provide adequate educational provision for the gifted, and they believe that they do not know how to foster and handle the gifted successfully" based on their self-efficacy scores (p. 151). Pre-service teachers require multiple facets of training to become properly equipped for their future classroom interactions. One specific aspect of pre-service teacher training needs to include descriptive information about characteristics of GT students, clear identification of GT students, and how to best provide engaging and challenging educational opportunities for students with varying cognitive abilities (Matheis, et al., 2017). In-service teachers also require "adequate training, time, and support to learn how to effectively implement these skills and strategies" including acquiring differentiation strategies and curriculum enrichment strategies (Reis & Renzulli, 2009, p.316). Gubbins et al. (2014) identified seven principles of effective GT PD:

1) requires a personal and professional commitment of participants to make a change in existing strategies and practice
2) reflects identified need of those educators who are expected to engage in the professional development
3) requires prolonged time for practice, feedback, and reflection
4) needs to be designed to have a specific and clearly delineated impact on students,

teachers, and curriculum, school policies, or school procedures

5) necessitates a "professional and personal growth plan"
6) requires administrative and collegial support
7) involved the collection, analysis, and application of school and district data to make informed decisions

There are numerous methods of achieving TE and PD, but it is certain that a solid foundational understanding of GT students and their needs should be provided to teachers with all levels of experience. Because identification of and programming for GT students is inconsistent between school districts throughout the US and the world, educators must be given explicit training in order to determine GT candidates and how to align GT educational experiences with local and federal policy requirements (Seigle, et al., 2010). Pre-service and in-service teachers may not always possess sufficient knowledge about GT student characteristics or identification even though they may have completed mandated GT training. GT TE and PD for educators and administrators offer opportunities to improve teacher self-efficacy as they serve GT students. PD intentionally developed to provide strategies for differentiating activities, accelerating curriculum, and designing appropriate enrichment experiences is necessary to prepare GT educators whether they are new to the classroom or are seasoned teachers (Reis and Renzulli, 2010).

GT Teacher Education and Professional Development Through the Lens of CRP.

Teachers are arguably the heart of a classroom as they cultivate its culture and climate. Designing the culture of a classroom must be intentional. However, an educator

cannot be intentional without a goal to aim toward and a distinct understanding of how to sculpt and mold the classroom environment with their words, tone, and actions. Ford (2001) states that "one must want to become a culturally responsive teacher, which means seeking educational and cultural opportunities that strengthen one's cultural sensitivity, knowledge, and skills" (p. 242). Specific cultural diversity training is necessary to prepare the many White teachers who make up a disproportionate number of educators to best interact and teach students from all cultures (Ford et al, 1997; Ford & King, 2014). As a teacher becomes more aware and enlightened about their own beliefs regarding students and student learning, then educators are free to search for ways to practice CRP through training, discussions, or other authentic learning experiences for themselves as professionals to expand their understanding and alter their original and limited beliefs (Gay, 2018). This is not a condemnation of an individual educator (Eberhardt, 2020).

Each person is born into a specific culture, grows and learns in a certain environment, and acquires unique experiences and biases over time whether consciously or unconsciously (Eberhardt, 2020; Ford & King, 2014). Once GT educators understand more about diverse cultures, they can do more than simply convey information; they have the potential to sympathize or empathize with more students. GT students' unique gifts, talents, and personalities are ingredients for a unique classroom culture. If educators approach their understanding of GT students similarly to that of culturally diverse students, seeking to know them better in order to support them more effectively, that genuine educator inquiry can lead to authentic GT/cultural experiences for all who participate in meaningful conversations and can eventually lead to collaborations for tailor-made enrichment experiences. When educators understand individual students

more fully, they may be able to discover giftedness or talent right where it was hidden! The idea of watching for talent is an important concept and goal for GT educators to keep in mind (Callahan, 2005; Felhusen, 1996; Ford, 2010; Renzulli, 2012; Subotnik et al., 2017) and is possible to be aware of in any classroom for any student. Every decision made for the sake of students should be examined through the lens of CRP to draw upon the strengths of each child whether in the context of school-house giftedness or creative productive giftedness (Renzulli, 2012).

Differentiation for Educator Needs.

Regardless of the concepts being conveyed through TE or PD, the method of delivery for training should take into consideration differences in educator learning styles and needs. During this particular time, due to COVID-19, public health concerns present unique roadblocks to educators in multiple ways. Even though not all issues dealing directly with COVID-19 will be addressed, this section includes descriptions and examples of online and face-to-face versions of GT TE and PD and their benefits and drawbacks.

Online learning is a necessity at this unique time in history. Education has been interrupted on a large scale. And yet, technology provides the potential to allow learning to continue. While the quality of learning in a classroom as compared to an online classroom setting is debatable and depends on each student, their learning styles and circumstances, the option for online learning for educators seems feasible and more accessible for most. Edinger (2017) examined a successful online GT PD tool called the PACKaGE Model that includes five components of pedagogy: attitude, practice, collaboration, attitude, and collaboration. Teacher initial satisfaction was reported as

"excellent to the Model's effectiveness, adequacy, and overall quality" (Edinger, p. 309). Six months later, participants stated they experienced a positive change to a great extent in each of the five pedagogical components. At six months, the overall drawback of this particular tool seemed to be a lack of time to practice provided by the online training Model based on the survey responses provided. While this is only one example of an online GT PD, it is reasonable to suggest that GT PD can be effective when delivered in an online format.

Fraser-Seeto, Howard & Woodcock (2015) discovered that most GT teachers surveyed were not aware of a flexible, self-paced online GT PD opportunity and therefore, had not actively participated in it. After being made aware of this particular GT PD, a majority of educators surveyed indicated that they would be willing to participate in the GT PD in the future. Multiple factors could have prevented these educators from completing the GT PD including a lack of GT support on campus and lack of awareness of the GT PD, based on the survey responses (Fraser, et al., 2015). This study reinforces a need for direct communication to convey needed information to teachers with regard for GT PD. In addition to effective communication, if no GT coordinator or GT support person is in place to serve teachers at a particular school campus, administrators should consider providing a support person to facilitate GT PD in the future.

In person GT PD was more likely prior to the COVID-19 quarantine. At this time, online PD is currently offered more frequently depending on district and community occurrences of COVID-19. Educators can fulfill their required GT training hours by attending PD through their district or other education entity approved by their district online synchronously or asynchronously.

In Texas, the Texas Education Agency (TEA) mandates a thirty-hour initial requirement for GT educators and a reoccurring six-hour update once per school year after the thirty-hour initial requirement is acquired (TEA, 2019). Because educators learn in unique ways, Wycoff, Nash, Juntune & Mackay (2003) conducted research around a GT PD that offered three options to maximize teacher choice of how educators fulfilled their six-hour GT update. Based on teacher perspectives, the following GT PD characteristics were recommended:

1) Administrators must align PD goals and objectives with district goals and objectives.
2) PD experiences should target small teams of teachers grouped by teaching area, discipline, and grade level with common interests and responsibilities.
3) PD must match training with the teacher's expertise level.
4) Planners of PD must select presenter with recent, practical experience.
5) Programs must balance theory with knowledge and skills immediately transferable to the classroom.
6) Presenters should limit the lecture style of presentation and incorporate a variety of activities and opportunities for discussion into the format.
7) Planners of PD should offer opportunities for reflection and feedback through follow-up experiences on the same topic.
8) Administrators should provide opportunities for teachers to collaborate with peers and mentors to incorporate new concepts.
9) Program planners should incorporate the expertise of district staff.
10) Planners of PD should consider alternative forms of PD such as book studies,

teacher inquiry, and peer coaching. (Wycoff et al., 2003, p. 40).

The recommendations supported by their findings shared several characteristics of effective GT PD with Gubbins et al. (2014), Hammer (2013), and Warford et al. (2013). This study is noted because this study involved several PD choices and teacher perspectives that spoke shared concerns for effective PD.

There is much to say about TE and PD with regard to GT students and their needs. Ultimately, we must meet the needs of the educators who serve GT students to prepare them more fully for facilitating an effective, motivating, engaging, and fruitful GT classroom experience. GT educators must employ CRP strategies within their professional practice, actively seeking personal connection with each student (Ford et al., 2018; Gay, 2018, Ladson-Billings, 1995; Reis & Renzulli, 2010; Renzulli, 2012). Once GT educators authentically know their students in more depth, educators can find more relevant ways of bridging the gap between a student's home culture and school culture with respect to all connected. With a distinct understanding of GT student characteristics, GT identification at the local level, and the best practices for GT educational experiences, GT educators will be able to meet the diverse intellectual, cultural, and social-emotional needs of their GT students.

GATE is beneficial for learners with a unique set of learning needs. It provides an environment where learning can take place in a very different way than within traditional classrooms. GT learning can be messy as students explore, apply, design, and create novel products and/or performances perhaps even directly affecting their communities. As GT educators are provided with the tools they need to become self-aware, they can seek to change their own paradigms and biases about how they view themselves and

various groups of students. GT educators must be equipped with specific training regarding the unique characteristics and needs of GT students and how to serve them most appropriately. With both CRP and GT education and professional development, GT educators may have a clearer understanding of how to engage and challenge GT learners within each learning experience. With appropriate TE and PD, GT educators will be better equipped to seek out talent, and to become empowering mentors to those students they connect with and coach in the educational setting.

Parent Involvement

Parents are a vital part of students' progress from the onset of their education, i.e. eating with a spoon or fork, learning a language or two, being redirected to not bite their friends, and the plethora of skills that parents facilitate with their children. Parent perceptions of formal education including specific learning environments in unique ways shaped and molded by their own experiences. Parent perceptions are frequent indicators of student perspectives about education (Del Siegle, Rubenstein & McCoach, 2020). Parent perceptions can be used "to understand student motivation and help students appreciate the value of academic achievement" (Del Siegle et al., 2020, p. 13). Parent involvement within education is a logical support for GT students as they navigate their own understanding of their characteristics, capabilities, and potential achievements as they grow.

Gathering GT stakeholder perceptions is a foundational place to begin when investigating GATE programming and services. Once stakeholder perceptions are gathered, valuable insights into the needs of parents, educators, students, and other GT administrators become clearer. By examining the literature, it is apparent that parents of

GT students play an integral part in the educational process. The type and frequency of parent involvement is based on many aspects of parent understanding and resources available to parents. This section will provide an overview of GT parent perspectives, other GT stakeholder perspectives, and evidence from the literature to shed light on multiple benefits of GT parent involvement.

Parent-Educator Partnerships

The combination of GT parents, GT educators, and other GT stakeholders working together toward the common goal of supporting GT learners is a powerful collection of resources. Radaszewski-Byrne (2001) states that "The professional/parental relationship allows parents to assume the role of instructional partner…" (p.41). Multiple research studies provide evidence supporting the belief that parent involvement creates a positive resource for children's education (Bicknell, 2013; Radaszewski-Byrne, 2001; Rotigel, 2003; Weber and Stanley, 2012). An active connection to their child's educational environment and educators creates a conduit for communication and learning opportunities for GT parents to participate in various ways both inside and outside of the classroom (Radaszewski-Byrne, 2001).

Some studies identified specific needs that educational entities and stakeholders could offer including training and workshops for GT parents to provide information about GT learner characteristics (Duquette, Orders, Fullarton, & Grewal, 2011; Koshy et al., 2011). Cultivating a GT stakeholder network is a foundational to supporting unique GT student needs. Rotigel (2003) noted that educating gifted children requires, "a willingness to work together with other adults who are involved with the child" (p. 213).

Parent Roles as Resources

GT parents have much to offer toward their child's learning experiences. Gifted learners possess unique social, emotional, and intellectual needs beyond the basic physiological needs of other children and adolescents (Reis & Renzulli, 2010). Parents of gifted children can be a resource to their child in direct and indirect ways; according to Radaszewski-Byrne (2001) parents of GT students can serve as learners, helpers, supporters, sources of information, resource people, teachers, and agents of change alongside educational professionals. Bicknell (2013) denoted roles of parents as motivators, resource providers, monitors, mathematics content advisers, and mathematical learning advisers" (p. 85).

Educating GT students is a lifetime commitment. Parents serve in some roles within the classroom and others within the home depending on their skills and abilities. Regardless of the location, "parents need to be considered as a key source of information in the early identification process" (Bicknell, 2013, p. 92). "Parents can also share their children's interests and aspirations" (Del Siegle et al., 2020, p. 13). GT parents could provide valuable input to GT educators continually throughout their child's GT experience. For example, while the following statement from Bicknell (2013) specifies mathematics as the area of giftedness, it is relevant regardless of the area of giftedness, "The home-school partnership is critical and needs to be strengthened so that parents are better informed about their children's mathematics education and provisions being made to cater to their children's special interest and ability in mathematics" (p. 92). Gifted students should be supported by both parents and GT educators to allow them to explore areas of interest in deep and meaningful ways through creative process and product (Reis and Renzulli, 2010).

As a “change agent” (Radaszewski-Byrne, 2001, p. 41), parents can offer their support at and beyond the campus level. Parents in one study believed “that GATE students are our future leaders and that policy decision must be made to provide for gifted students’ educational needs” (Young and Balli, 2014, p. 244). GT parents expressed concern for funding to support GT programming (Young and Balli, 2014). Parent input on decision-making levels where funding decisions occurs is another type of advocacy for GATE. At the district level, decision makers must allocate services to provide “suggestions for instructional strategies and programming” to ensure equitable education for GT students (Duquette et al., 2011).

Research identifies the significance of GT parents as essential advocates for their GT children in multiple ways from the classroom, extending into the home, and reaching into the realm of GT stakeholders at the state and federal levels according to their convictions. Those GT parents who advocate for their child’s needs believe they can make a difference in the course of GT programming and services. However, some GT parents may not have this confidence.

Supporting GT Parents

Some GT parents may feel capable and confident to support their child whether in the school setting or at home, while other parents may not hold this perception. Parents in several studies acknowledged their need for additional support from educational entities (Duquette et al., 2011; Radaszewski-Byrne, 2001; Weber & Stanley, 2012). Research identifies multiple issues underlying a need for educational support for parents of GT students and the many roles and responsibilities GT parents support their children. Educational stakeholders such as GT teachers, school counselors, etc. serve as resources

to GT parents as they navigate the unique needs of GT students over the course of their educational career. Some parents may need support with information, strategies, or resources.

In a study in urban areas where "lower income families face some particular challenges" (Koshy et al., 2017, p. 13), parents shared concern that they were unable to successfully support their child's learning outside of the classroom environment for various reasons. When parents expressed a low self-efficacy (a lackluster belief that they can successfully support their GT child), their perceptions indicate the identification of a need for information and external resources to feel empowered to support their children regardless of community challenges or other barriers that may seem disheartening. GT stakeholders must be prepared to design and deliver appropriate GT specific information, strategies, and resources to support GT parents. For example, GT parents may or may not be aware of their child's strengths and needs. GT parents should be given information to outline general characteristics of GT learners and strategies to bolster GT student critical thinking in various scenarios.

A lack of understanding of the GT process necessitates the need for educational resources to supplement GT parent comprehension of the GT identification process, GT student characteristics, strategies that GT students require, as well as other practical information to provide a solid understanding of GT process and services. With campus support, GT parents can be empowered to more effectively support GT learners' overall growth and success by acquiring knowledge of their child and strategies to support them. As GT parents are confident in the GT identification process, GT programming

implementation, and GT advocacy process, “tensions between parents and school could be removed, or at least minimized” (Bicknell, 2013).

In addition to explicit information provided by a campus or district, GT stakeholders can encourage the formation of GT parent groups. Parent networks are an informal form of education that has potential to support GT parents. Weber & Stanley (2012) explain the benefits of parent groups.

> Organizing parent groups early in a child’s school experience can help educate parents about their unique role as parents of the gifted, provide support to parents as they experience raising a gifted child in school, and inform parents about what is known regarding what it means to be gifted… (p.134)

Parents whose children possess both giftedness and an additional learning difference need specific educational support regarding support groups, strategies, and program services available (Duquette et al., 2011).

Parents of GT learners and other GT stakeholders working together creates an educational network to support GT learners throughout their educational experience. Multiple adults advocating for the growth and success of GT learners provide GT students additional resources. Barriers to GT learning can be mitigated by common objectives, training of parents and educators, and resources provided by districts (Duquette et al, 2011; Young & Balli, 2014).

Summary

This review literature provides some foundational insight into GT learner characteristics and needs as well as the benefit of culturally responsive teaching. However, there is little research specifically related to middle school level GT student

learning experiences. It should be noted that even less research is available with regard to middle school GT services during the administration of COVID-19 protocols due to the novelty of the circumstances and school year timeline that the pandemic affected in its entirety. The following study will serve to begin to fill the gap in the literature to offer unique middle school GT educator perspectives their implementation of GT program services under the constraints of COVID-19 protocols in a large urban public school district.

Chapter III

Methodology

"Planning is bringing the future into the present so that you can do something about it now."

—Alan Lakein

Introduction

This chapter explains the rationale for using case study as the research methodology for this study. In addition, it explains the research procedures selected for this study along with the rationale for why aspects of the study were incorporated into its design. Each part of this study seeks to answer the research question: *What are middle school GT educator perceptions of COVID-19 protocol impacts on their implementation of GT services?*

This research study was designed as a qualitative case study to gather unique input from Gifted and Talented (GT) middle school teachers. Qualitative research offers methods that allow gathering specific data to be later analyzed and inferred to construct meaning, rather than the purpose of collecting data to confirm or deny a hypothesis as quantitative research attempts to do (Creswell & Creswell, 2018; Stake, 1995). Exploring perceptions of GT educators' experiences allows participant's perceptions, beliefs, and understandings to guide the data collection process as themes emerge out of personal responses creating a more holistic picture of authentic educational situations (Creswell & Creswell, 2018).

Rationale and Methodological Framework

The purpose of this research study was to construct an accurate understanding of teachers' perspectives regarding their implementation of GT learning experiences in their middle school classrooms in light of constraints and protocols put into place due to COVID-19. Because teachers are in the "trenches", they directly observe students' reactions, processes, and unique personalities even though their interactions have been limited by COVID precautions. Many aspects of public education look quite different than even one year ago. Case study methodology was chosen to gather specific input from a specific group of teachers who directly impact the learning experiences of middle school GT students for the purpose of identifying generalizations occurring in a large, public school district during COVID-19 precaution protocols (Stake, 1995). Using a constructivist, pragmatic approach, it is the goal of this research study to evaluate a current situation by gathering information about teacher perceptions of their own implementation of GT learning experiences (Creswell & Creswell, 2018; Stake, 1995), and discussing practical applications for the overall findings (Creswell & Creswell, 2018). Several factors led to the sudden and dramatic changes that education operates under at the present time. These changes are most certainly noteworthy in this unique global circumstance.

Participants

This case study employed a purposeful convenience sample of four middle school teachers in the same urban public school district. Participants' gender and ethnicity were taken into consideration. However, participants were selected by researcher's access to educators. While the participant group began as an all-level convenience sample, the participant sample was narrowed to include only middle school educators rather than

include all educators who serve the GT population to illuminate possible contextual phenomena. Originally, possible participants included elementary level GT leads, a middle school level GT coordinator, high school level Advanced Placement teachers, and a district level GT specialist. But, by narrowing the participants to include only middle school GT educators, the glimpse through this "window" into a district's existing GT program may more accurately represent a middle school educator than collecting a smattering of GT perspectives from all educational levels. GT educator roles within this particular district are quite different with regard to grade level. In addition, each educational level has different developmental student needs. Thus, exclusive middle school educator data gathered is more representative of this specific educator population perspective.

At the time of the study, all participants were current middle school GT educators employed in a large, urban public school district in Texas in the United States. In this particular district, middle school incorporates only 7th grade and 8th grade students and is referred to as "junior high school". Participants are actively employed as GT teachers in these areas: history, leadership, advanced math, and English.

Positionality

As the principal researcher, I am a twenty-three year educator who teaches science for regular and GT students. I am a current science department chair. To avoid positionality concerns or any perceived obligation to participate in the research study, I chose not to ask my fellow science teachers to participate in this research study. All participants involved in this research study did not directly participate with me in any lesson planning or course design, nor are they part of the science department. I do not

hold any other formal leadership role. I am on an "advisory team" with one participant which means we share some students among our classes. Our advisory team relationship has no influence on our individual interactions with those students other than shared communication with the shared students or their families, nor does it have any influence over their involvement in the research study. None of the participants knew who else was invited to participate in the study until the focus group discussion began which was the last interaction within the study.

As the principal researcher, I actively participated in the research study through reflective journaling as I experienced and reflected upon each question in the research study alongside my participants. I was unaware of their opinions regarding the questions/answers on the initial survey before completing it myself. I had no preliminary preconceptions about participants' thoughts about any of the interview questions prior to its administration. Participants did not know the questions for any part of the research study prior to the administration of any portion of the study: survey, interview, member check, or focus group. Participants were only aware that the study dealt directly with their role as a GT educator as stated in the consent form (Appendix A). I took on the role of biographer during interviews. Later, I took on the role of interpreter as responses were gathered and analyzed. My role as a researcher evolved to provide additional synthesis of meaning after collecting and analyzing participants' responses (Stake, 1995).

Gathering responses from four different educators has been extremely valuable. Hearing multiple perspectives from teachers who have been employed by the same district for several years, as well as from one who is new to their current campus, proved enlightening. Perhaps the contrast of teachers' years, variety of content, ethnicities, and

educational experience highlighted prevalent issues, concerns, and insights (Stake, 1995). The semi-structured survey revealed explicit differences between each educator's teaching experiences and provided focus to narrow individual interview questions via open-ended questions. Participants answered member check questions after their interview to clarify and elaborate on their perceptions. Final input was gathered during a focus group during which all educators participated and interacted for the first time. By gathering these professionals' opinions through one survey and three interviews, their responses shed light onto current GT learning opportunities offered to middle school students under historically unique circumstances that have not occurred in the realm of modern public education to date.

Context

Factors that may affect the study include heightened racial tensions throughout the U.S. due to the death of George Floyd while restrained by police May 2020 occurring during initial COVID-19 "shelter-in-place" orders. Simultaneously, as racial tensions increased, stress, and anxiety dramatically increased due to various uncontrollable mandatory changes including loss of employment, lack of physical interactions with others, as well as reimagining "normal" within a day or household (CDC, 2020). Mental health issues of adults, adolescents and children dramatically increased. Suicide attempts increased for adolescents during the COVID-19 pandemic (Ramirez, October, 2020). Exacerbating tensions across the nation, presidential campaigns for the upcoming 2020 presidential election continue to create division among those living in the U.S. (Dastagir, 2020).

In light of the global, national, state and local circumstances, education was not

unaffected by the all-encompassing events. In fact, the educational system, as an entity, was examined at the federal, state, and local levels to identify needs, strategies, procedures, and measures to ensure the safety of students, teachers, staff and community at large prior to reopening classrooms. Much controversy surrounded the reopening of schools in the F2F format. The concern over a rise in the number of positive COVID-19 cases due to schools reopening, made policy makers and stakeholders, scrutinize each decision districts put into effect. Even at this time, COVID-19 numbers are currently increasing during November 2020 in Texas immediately prior to the research study. Students' educational format (remote or F2F) changes depending on their "contact" with a person who is COVID-19 positive. Quarantined adults and/or students must be out of the school building for 14 days if they are a contact, so the faculty and class compositions are constantly in flux. Being sequestered for an extended amount of time causes mental and emotional stress and fatigue for students, parents, teachers, and other community members directly related to the educational system (CDC, 2020).

This study was conducted during COVID-19 pandemic protocols and included restrictions and requirements regarding social distancing, masks worn in public places, frequent hand washing and/or application of hand sanitizer, frequent sanitizing of desks and surfaces, and other specific protocols as required in specific environments. These protocols were mandated in many public locations and in public schools. Complying with state mandates from Governor Greg Abbott as well as Texas Education Agency requirements has been challenging. This state's public school system resumed face-to-face (F2F) learning in classrooms using COVID-19 protocols September 2020 after much research, planning, and discussion at state, district, and campus levels. Before and during

the time of F2F instruction, numerous daily innovations were designed and created to meet various needs as they were discovered. Truly, “flexibility” or “innovation” could be the motto of this school year in many regards. Faculty, staff, and administration constantly re-invented best practices to maintain health and safety, maintain sanity, and provide aligned, quality instruction for all students.

With regard to COVID-19 requirements and providing equitable education for all learners, an online Learning Management Systems (LMS) has been implemented from the previous school year (spring 2020) and brought forward into the 2020-2021 school year. During both the spring of 2020 and the Fall of 2020, educator plan, design, create, and troubleshoot their modules within the LMS each week. All students enrolled in this school district are provided TEKS aligned instruction and personal communication through an online LMS for all subjects (core classes and electives). Students are also provided synchronous instruction opportunities through Zoom and/or Microsoft Teams meetings depending on the educator. Zoom and Microsoft Teams meetings provide some personal interaction as well as instruction. However, discussion, impromptu verbal interjections, and overall classroom interaction is hindered by mask wearing while engaged in F2F setting and participating in the synchronous meetings. (Tarc, 2020).

In some situations, the educational format of an individual may change multiple times during the school year if a student or a teacher is considered a contact with a COVID-19 positive person. For the student or teacher, their exposure to a person who is COVID-19 positive would cause them to be out of the physical classroom for 14 days in quarantine. A teacher would, therefore, have less interaction with students than while in the classroom. A quarantined student would only have virtual interactions with all of their

teachers. For those students who have 504 plans or Individual Education Plans (IEPs) and would otherwise attend F2F classroom learning, this may create an additional stress or anxiety for that student (Duan et al., 2020). If the quarantined student or teacher contracts COVID-19, then additional physical stressors occur that prevent learning for an unknown amount of time.

Current contextual constraints are multi-layered. Unfortunately, students who do not actively participate in their online LMS courses and do not attend F2F classes create an additional roadblock between themselves and those in the educational system trying to reach them. How do educators and administrators meet the educational needs of those who do not participate in F2F instruction, nor remote learning? Innovation and one-sided communication are not fixing this problem yet. Luckily, the flexibility and creativity of administration and educators will not stop because of difficulty; they simply birth the next new innovative strategy. Multiple professional perspectives help highlight new angles of problems and predict possible solutions. Therefore, collaboration is a functional tool for strategizing to fulfill needs as they present themselves. Similarly, the collaboration of the participants in this research study will help further the understanding of the GT learning experience as it exists currently.

Timeline of Data Collection

The IRB approved this study in December 2020. Consent forms were sent electronically to potential participants' preferred emails during December of 2020. Upon signed consent form responses, four participants received the initial survey in January 2021 via preferred email. The survey was formatted in a Google form for ease of participant use and desegregation of data. The survey took approximately 20-30 minutes

to complete depending on the participant. The purpose of the survey was to allow participants to provide input using open-ended questions, Likert scale responses, and closed questions regarding basic background about their teaching experience. Following the collection of all surveys, I created one spreadsheet with all participants' responses to compare responses easily. I categorized responses and created a visual organizer with potential emerging themes (Appendix, Figure 1). Participant responses from the survey guided the interview questions. Interviews administered lasted between 25-60 minutes in duration and were conducted via University of Houston officially licensed Microsoft Teams virtual meeting application. All interviews were transcribed by Microsoft Teams. Once the individual interviews were completed and transcriptions downloaded, transcripts and video was analyzed and coded to identify emerging themes. In addition, the individual interview responses were evaluated to prepare a member check questions for clarification of participant responses. Each participant received unique member checking questions electronically through their preferred email and responded with their clarifications and elaborations through the same email. The member check questions addressed unclear responses for accuracy and took approximately 15-13 minutes for participants to complete. Participants provided confirmation of researcher understanding for accuracy, provided feedback to clarify the meaning of their responses, as well as elaboration on some ideas presented during the interview. After all member checking questions were returned, collective responses were coded and categorized for additional themes or congruence and were used to adjust focus group discussion questions to burrow into participants' concerns. The focus group discussion included all participants and was conducted by the principal researcher via Microsoft Teams. The focus group

discussion lasted approximately 60 minutes. Clarifications about participant perceptions were addressed during the focus group discussion because that was the last interaction with participants during the study. The participants' responses from the focus group discussion were transcribed by Microsoft Teams, then coded, and categorized into overarching themes provided in the next chapter. Visual representation of overarching themes coded after the surveys and after the individual interviews are available in the Appendices.

Data Analysis

When investigating participant's responses, similarities and differences in their implementation of GT services during COVID-19 protocols emerged. Throughout the study, participants' verbal responses were examined using transcripts and video documentation and reviewed for clarification repeatedly. Observations were documented first, then conclusions based on evidence were inferred or clarified with direct questioning of participants and documented within the next section.

Analysis of participant responses was ongoing throughout the data collection process. After each phase of gathering participant input (receiving survey responses, conducting individual interviews, member check questioning, and conducting the focus group discussion), I evaluated each collection of responses for similarities and differences. Survey responses were combined to include all of the participant's collective responses in one spreadsheet to allow simultaneous viewing of all answers. Any clarifications of survey responses were addressed during their Member Check Interview questioning. Individual Interview responses were more detailed and complex than the survey responses. Coding the collective interview responses proved challenging due to

the number of questions asked and the lengthy and/or detailed responses. It was necessary to categorize responses visually to sort responses accurately (See Appendix D). Many categories that emerged during the Individual Interviews.

While there are follow-up questions embedded into the sample Initial Interview Questions (Appendix C), these "burrowing" follow-up questions were adjusted based on the Initial Survey responses and while conducting Individual Interviews based on their responses. During interviews and the focus group discussion, burrowing questions were used to evaluate the meaning of responses such as: "What am I hearing?", "What are participants saying?", "What is their body language?", "Why are they so passionate about this topic?", "What brought them to that conclusion?", "What type of experience formed their thinking?". These and other questions helped to guide the questioning during all interviews. Once responses collected from Individual Interviews, specific questions were sent electronically to each participant to clarify their response for accuracy of meaning for the Member Check Interview. All participants were asked to elaborate on their response to gather clarifying information. Member Check Interview questions were sent electronically to honor participants' time. All participants responded with all clarification and elaboration about specific responses that were requested. After receiving all Member Check responses, the Focus Group Questions (Appendix C) were evaluated and adjusted to address the themes that rose to the top of their priority evident by frequency and emotional emphasis put on discussions of a theme. During the focus group, participants had the opportunity to interact with each other, providing another layer of data. Focus Group discussion responses were clarified during the discussion to address any ambiguity or confusion. When analyzing the final input documented in the focus group discussion,

several reviews of the transcript and video documentation were needed to categorize participants' responses, to accurately denote the saturated topics of participant concern during this school year's GT implementation experiences. Following the identification of final themes, an outline was created to format a logical structure. Final themes that saturated the responses and conversations are documented in the next chapter.

Analysis Frameworks

As I coded responses by topic and patterns emerged, I referred to the Culturally Relevant Pedagogy (CRP) frameworks of Geneva Gay and Gloria Ladson-Billings to reference participants' relational connections to students, parents, staff, or other stakeholders. I also referred to the GT framework of Joseph Renzulli and his co-authors to construct meaning from participant responses as it related to GT implementation itself. Participant responses dictated the necessary frameworks for discussion. Both the CRP and GT frameworks were relevant throughout the study and guided the questioning.

Both CRP and GT frameworks were employed for very specific reasons. The original purpose for using CRP framework was to reference possible mindsets of GT teachers as they interact with their students and its significance within those student-teacher interactions. Incorporating a GT framework was necessary to address specific academic and social-emotional learning (SEL) needs of GT students. Both CRP and GT frameworks supported questioning focused on GT teacher-student interactions regarding relationships and educator implementation of GT services. These concepts framed the conversation surrounding middle school GT educators' beliefs about their implementation of GT services during this very unique time in education.

The purpose of analysis is to make meaning of the evidence participants provided.

All steps in the process of this research study are embedded within this Chapter and Appendices and can be replicated procedurally by others for future research. Member Check questions were not included due to the specificity of each participant's responses.

The emotional responses portrayed during interviews added a layer of depth to the conversation that did not exist as prominently in survey responses. Facial expressions and tone of voice during Interview also guided the Focus Group discussion. Participants seemed comfortable talking with others about the Focus Group questions using relaxed tones and reaffirming nods throughout the hour-long conversation. In contrast, Individual Interview body language and tone exhibited high levels of stress and/or anxiety due to the many concerns they shared. Notably, during the Focus Group discussion, participants offered more positive observations about GT students than expected. Final themes presented in the next chapter were those that all participants expressed concern for most consistently and frequently throughout the study.

Trustworthiness

Transparency of the study provides reliability of the study by incorporating details about rationales, gathering data, clarifying, and confirming understanding of responses, analysis, and interpretation of findings, as well as the conclusions and implications of findings. While the confidentiality of the participants was securely maintained, each step of the research process, its purpose, its justification, its results, and its implication were documented within the study for credibility. Each participant was given an opportunity to clarify their responses to confirm the researcher's understanding of their perceptions during the study and after the study was completed. The data was triangulated for credibility using the review of literature, the participants' professional input, and

researcher's professional reflections. The study was also presented to GT specialists to check for researcher bias. Their feedback was taken into consideration to address areas that needed clarity in the communication within this study.

Researcher Perceptions

As a researcher, I have more than one type of lens to reflectively journal about. I documented thoughts about implementing my own GT learning experiences. I continually reflected on the responses of participants to identify any similarities, differences and possible causes of their perceptions as a biographer and interpreter. Constructing meaning from their GT educator perceptions within this unique time in history was the ultimate goal of the research study.

Internal reflection is something that I do throughout the day each day. It is part of my personality as well as part of my personal habits and religious beliefs. Justifications for my daily and overall GT experience implementation and for my decisions made as a principal researcher were documented within my reflective journaling as I understand them. I will be comparing my own beliefs and perceptions to those of the CRP and GT frameworks, just as I will be doing for each participant's responses. Without revealing my participants' identities, I had professional conversations with my cohort group members, who are already aware of this research and my focus and goals for the study so they can aid me as I made meaning and identified patterns in participant responses. In addition, I offered my data to GT specialists and GT coordinators to check for possible researcher bias.

Conclusion and Implications

At this time, all responses have been collected, coded, analyzed, compared with

frameworks, and visually represented to provide a view into middle school GT educator implementation during COVID-19 protocols and the circumstances it creates for this group of educators in a large urban public school district. Significance of the data and implications for future research and possible necessary actions educational entities should address will be offered in the final chapter. This research will be offered to educational stakeholders interested in middle school GT program services and how they were affected by COVID-19 protocols. The data gathered during this study found in the next section provides welcome insight as the current GT program undergoes redesigning post-COVID education in Carbon ISD, in other public school districts in the United States and globally.

Chapter IV

Research Findings

"In every problem, there is a hidden treasure inside. It's your job to find it."

— Unknown

Introduction

The purpose of this study was to gather perspectives from current middle school gifted and talented (GT) teachers in order to glean insight into their experience implementing GT learning experiences during COVID-19 protocols. This study collected responses from four participants in the same large urban public school district. Participants answered a semi-structured survey, participated in an individual survey, addressed clarifying questions through individualized member check interview questions, and participated in a focus group discussion with other members of the study. This research was conducted during the spring semester of the 2020-2021 school year beginning in late January 2021 and ending in early May 2021 due to scheduling constraints. The following data was collected from four current middle school GT educators to understand aspects of their GT program implementation during COVID-19 protocols.

Research Findings

A collection of participants' responses from survey responses, individual interviews, member checking interviews, and the focus group discussion provided in this chapter shed light on middle school GT educator implementation experiences during COVID-19 protocols. After gathering input from all participants from January through

May 2021, four major themes emerged: 1) GT educators need a dedicated GT curriculum that encourages the application of critical thinking skills in personally relevant ways to support GT students more appropriately; 2) The GT learning environment was hindered by multiple factors related directly and indirectly to COVID-19 circumstances, but that this novel environment created opportunities for GT student growth; 3) GT Professional development should include cross-curricular critical thinking application strategies; and 4) GT parents should be more involved at the secondary level to effectively communicate valuable information about GT individual student qualities, expectations, and progress throughout the year among GT parents and educators. The following data supports and clarifies aspects of GT middle school educator implementation experiences during COVID-19 protocols. Some educators' input highlighted pre-existing issues prior to COVID-19 that surfaced under COVID-19 protocol requirements, while other themes manifested directly and indirectly from the circumstances created as governmental and educational entities continued mitigating the spread of COVID-19 through.

Theme 1: Curriculum and Instruction

The most prevalent theme participants expressed that GT educators need a dedicated GT curriculum that promotes the application of critical thinking skills in relevant ways to support GT students more appropriately. Throughout the research, all participants shared a belief that GT students would benefit from a specific GT curriculum at the middle school level to provide GT students with 1) collaboration and leadership opportunities, 2) increased intellectual challenge using critical thinking, and 3) student choice opportunities offering personal relevance, therefore promoting student interest and engagement. The perception that GT educators need a differentiated GT curriculum as a

support tool for GT students was shared and supported by all members of the study through verbal statements, nods to signify confirmation, or vocal affirmations within one or more stage of the study. Kristine's statement summarized the participants' collective belief: "They need an alternate curriculum."

Participants shared examples of GT learning experiences that outlined characteristics of a dedicated GT curriculum that provides collaboration, critical thinking application, and student choice. Throughout the following vignettes, participants provide glimpses into their implementation of previous and current GT learning experiences. It should be noted that student collaboration and leadership opportunities, application of critical thinking skills, and student interest are relationally intertwined within learning experiences. During his individual interview, Oscar recalled previous experiences as an educator that incorporated both critical thinking and student interest:

> I've had a couple of kids who come into history class, and they do well because they're strong in literacy…There's no interest; there's no passion. Their giftedness is more driven towards mathematical kinds of things. I've probably had more kids in my career who are gifted on the math side and are really bored by the storytelling that happens in a history class.

Walking through the structure of a lesson, Oscar explained that he would present students a problem, and let them know, "I'm not going to give you the answers." He continued explaining his rationale bent on promoting GT student interest and engagement: "So what I'm going to do is: 'Let's go through the process' And that's where I can get a lot of those kids who are gifted on that side as we go through the process" as he referred to GT students' giftedness in math or other non-history giftedness. Oscar noted that the critical

thinking engaged students due to GT students' higher interest in the intellectual challenge Oscar provided during learning experiences. When sharing other aspects of learning that supported GT students, Oscar stated a direct correlation between leadership and collaboration which also increased student interest and engagement:

> I think a lot of it…when allowing the collaborative side of it…it helps differentiate for them because it allows them to lead. And a lot of them have some talent, you know, some natural talent in their leadership so that helps them.

Oscar elaborated on collaboration and leadership during the focus group:

> I've noticed that when I've had my kids in a collaboration online for this year, if they can lead for collaboration, they wanted to do it. If they did not get to lead, the collaboration kind of thing went out the door or they became disruptive in their groups 'cause they were not engaged enough on their leadership side.

Oscar's experience to engage students through leadership and collaboration was noted as a successful method of GT implementation in pre-COVID learning experiences. During this school year, collaboration, and therefore, leadership opportunities decreased in frequency due to COVID-19 protocol requirements. Decreased collaboration opportunities for GT students during COVID-19 protocols highlighted the need for collaborative, small group learning experiences that present create opportunities for student leadership especially within the GT student population. Additional concerns regarding decreased collaboration opportunities in general will be addressed further in the next section.

In addition to the need for student collaboration and leadership opportunities, GT educators expressed a need for a GT curriculum that includes increases intellectual

challenge using critical thinking. All participants shared perceptions that the current learning environment does not allow them to provide the same level of critical thinking as during a pre-COVID school year. For example, when asked what she needed to "feel supported as a GT educator", Kristine compared her experience and her perceived GT support in Carbon ISD to her previous experiences in another district when she shared:

> I mean, honestly, seeing how other districts have implemented the GT curriculum and then comparing it to what I've seen in Carbon ISD* during my time here, I feel like that, across the board, especially in junior high, I think they do a better job of it in elementary, but in junior high, there's not a huge focus on what is really going to challenge this group of kids. And a curriculum that is a faster pace and allows for them more opportunities to pursue things of interest and… to move faster and deeper, in a way that all students can, you know, be challenged…because at this point, I mean, we're just kind of focusing on what's best for everyone and not really what's best for the individual.

Kristine's perception expressed concern from the perspective of an educator who has experienced another district's implementation of GT program services. All other GT educator participants' responses corroborated Kristine' dual perception that a GT curriculum should be provided to GT educators for the benefit of GT students. Her identification of an accelerated, thought-provoking, individualized curriculum would provide services that agree with characteristics of a supportive GT environment described by Reis and Renzulli (2012).

Daisy shared her experience with preparing thought-provoking experiences for GT students using deeper depth of learning,

> To answer the question, 'How do I spark the advanced [sic] that they think they've heard it all, seen it all?' I try and bring in those pieces that they haven't. I do a lot of personal research, but I enjoy it…it's not professionally developed material."

When recalling opportunities to challenge students, Daisy stated, "Most of the time only the GT kids would have time to explore and a lot of times what I like to do with those are cross curricular." Daisy collaborated with the English department chair to create lessons to extend history lessons while addressing "non-fiction reading" learning objectives simultaneously.

All GT learning experiences are designed and developed by individual GT educators.

A third aspect of a specific GT curriculum identified a need for student choice opportunities to provide personal relevance, promote student interest, and therefore, student engagement. As Oscar shared earlier in this section, when students were leading in a small group setting, they were engaged because of their interest level. When there was little student interest, his students disengaged or became disruptive. Student choice would allow student "buy-in" based on their preference. For example, Kristine explained how she differentiated for her GT students. She shared that her GT students enjoy the book project that they work on through evidence in the quality of their products:

> …get a lot of choice on, like, what they're reading, and then what they produce based on the skills that we're focusing or targeting during the six weeks. And they love it. And they always come up with, you know, great projects and products. And that's been really helpful for them and for me to see. You know what they're doing.

Kristine's students' creative products provide evidence that student choice promotes student interest. In turn, it could be inferred that high student interest increases student effort. Kristine shared that her students created "podcasts about their books, or … a poster with images and symbols about whatever they read" based on their personal interest in a particular reading selection. This choice provided a learning experience that cultivated student effort toward a quality product denoted by Kristine's positive tone and body language as she recalled the book project learning experience. GT educators use student products to gauge student understanding through creation or demonstration. A GT curriculum that supports GT students through student choice would align with GT educator perceptions and past evidence of student growth and successes.

To further support critical thinking and student choice, Daisy explained that GT educators need to "have that spark" to prevent lack of interest. "Thinking about our current processing of information, I think, you know, there has to be a balance between consistency and boredom." Daisy explained differentiating "consistency" in the structure of lessons to address students' needs.

> So consistency for a level kid is like the sweet spot because they're already like, 'I'm nervous already 'cause I don't understand the language' or 'I'm nervous already 'cause I'm not great at school or whatever', but if I have consistency of 'Ok, on this day I know to expect this on this day', but for GT kids that consistency, you know, they start to shut down, like, it's already boring.

Regarding a GT curriculum, Nadia summed up the answer to her own question, "What is the goal of advanced classes?" when she stated, "My explanation would be to embrace those advanced learners and foster their advanced thinking skills." The creation

and implementation of a GT curriculum could support this goal. At the time of the study, Carbon ISD had not implemented a specific GT curriculum or GT course for the middle school or high school level. “Advanced” courses were open to enrollment for all students, a situation that brings challenges to GT educators to scaffold general population students to reach GT pace or depth. This area is an area of challenge for Nadia as she instructs students in accelerated math teaching two years of content in one school year:

> “The big thing is to give them freedom, give them flexibility, hone their skills. And this is, this is what I usually do, you know, what I try to do, give them choice boards a lot of times, you know, offer them a lot of collaboration in class. Again, just to stimulate the thinking, stimulate the process. And so, when I have such a diverse range of skills in the classroom, I'm not able to do the honing. I'm, I'm becoming stretched extremely thin to address kids who are still don't know their multiplication…This is my I think sixth year teaching this and it's the same story every year. We are really not focused on quality. I think we focus on quantity and it's, it's a disservice for the kids who are truly GT.”

Oscar recalled his first year of teaching GT classes in a different district and how novelty created student interest, “I covered that one year just teaching that class which was really fun just due to the fact that all the crazy stuff I wanted to do, the kids wanted to participate.” In that district Oscar stated that “They separated GT students from the advanced classes, so there was no differentiation. They tested students in the junior high by the subject, so they only offered GT classes in the four core subjects.” The students who qualified for GT services were provided specific time, space, and guidance about serving GT students in that district at the beginning of Oscar’s GT experience. Abiding

by the Carbon ISD scope and sequence, Oscar has struggled with compromising implementation of the depth of learning GT students require versus in comparison with the specific time content should be studied. “But unfortunately, when it kind of interferes when I’m teaching…I always get in trouble for not keeping up with the scope and sequence…I think what ends up happening a lot of times for gifted students, it’s just “Hey, we can cover just a bunch of content faster and quicker…but that’s not what learning is. It’s conceptual.” Implementation of depth of learning takes time. A dedicated GT curriculum could take this need for time relative to the depth of learning into consideration.

At the time of this study, Carbon ISD offered advanced courses that may include accelerated pacing and/or depth of knowledge, but specific course implementation is entirely dependent on the individual GT instructor. Individual GT teachers who have completed a 30-hour initial GT training or equivalent and subsequently their 6-hour GT update, design and create their own learning experiences within their advanced courses at the middle school level based on state required learning objectives and standards. Throughout the study, all participants’ input reinforced best practices suggested by Reis and Renzulli (2010) because each participant agreed that a specific GT curriculum would help them meet the needs of GT students more effectively than with their GT professional development and lesson design and delivery alone. A GT curriculum that is tailored to the specific needs of individual students was supported by multiple researchers (Ford, 2018; Reis & Renzulli, 2010; Renzulli, 2012; VanTassel-Baska, 1998).

As a researcher, I conducted individual conversations with multiple GT leaders in this district to gather more information about the GT program’s evolution over time.

According to GT administrators, the previous five years have been the result of a "restructuring" of the GT program at the elementary school level. One of the GT leaders I interviewed sparked the idea of a need for restructuring years before the restructuring came to fruition. This GT leader gathered qualitative and quantitative input from teachers, administrators, and other stakeholders regarding the GT population. GT leaders interviewed stated that there are future plans for a secondary "restructuring plan" that would have started during the 2020-2021 school year, but unfortunately, COVID-19 postponed the plan until further notice. They stated they are hopeful that the plan for secondary improvements to begin implementation during the 2021-2022 school year.

Holistically, when looking at GT educators' perceptions, the need for a GT curriculum that 1) provides collaboration and leadership opportunities, 2) increased intellectual challenge using critical thinking, and 3) student choice opportunities offering personal relevance promoting student interest and engagement is clear. The organic interactions that arise from collaborative learning experiences seem to be one factor sparking GT student interest and engagement. Novelty created within each unique collaborative, small group learning experience seem to increase the likelihood of GT student interest and engagement. And at the foundation of GT learning experiences, deep and complex critical thinking must be woven within GT learning opportunities. With the resource of a GT curriculum available to them, GT educators believe they will be 1) more supported by their district and 2) more equipped to address individual GT student needs.

Theme 2: Barriers to and Opportunities in GT Learning Experiences

The second emergent theme shared by all participants was the issue that the GT learning environment was hindered by multiple factors related directly and indirectly to

COVID-19 circumstances, but that this novel environment created opportunities for GT student growth. Examining the barriers within this issue, participants identified factors that hindered GT student learning this year. Multiple barriers related to the online learning platform included decreased collaboration opportunities, decreased opportunities for communication support, and the evolution of unsafe learning environments since the inception of the COVID-19 pandemic. The online learning format presented concerns regarding 1) student-teacher relationships and student-student relationships and interactions between each entity, 2) the depth of learning, 3) decreased collaboration opportunities. In addition to specific online format barriers, participants identified several external factors outside of educational environments that also created barriers to student learning experiences.

Online Format Barriers.

Participants believed that implementing learning experiences via an LMS platform limited students' learning experience as compared to more traditional classroom interactions. Student-teacher interactions and student-student interactions were limited by masks and social distance as well as by the method of delivery of content and activities. In order to create equitable opportunities for both in-person and online learners, all lessons were administered online through an LMS in Carbon ISD.

At the beginning of the study, participants answered a survey question that provoked participant explanation of their implementation using an online platform: "When thinking about your delivery of instruction in an online setting, how has COVID-19 impacted you as an educator?" Kristine stated her concern about a lack of student engagement:

> I have a lot of students who have not been participating and it is disappointing. There is such a difference between the students who are able to push through this time and still learn, and students who are not participating. The educational gaps are increasing, and it's been harder than ever to keep pushing forward when so many are falling behind.

Her statement summarized participants' overall perceptions of the effectiveness of online learning experiences.

Student-Teacher Relationships Effects on Student Motivation.

A decrease in the depth of relationships between students and teachers was direct effect of COVID-19 protocols requiring online learning and LMS implementation of learning experiences. Kristine stated the following at the beginning of the study in her survey responses:

> COVID has made it a challenge to build the type of relationships I typically have with my students by this time of the year. I don't really know my online students and it's been hard to truly gauge their academic abilities.

When clarifying Kristine's perception of any connection between teacher-student relationships, she stated,

> I absolutely believe that students will be more reluctant to try when they do not have a positive relationship with their teacher...Students tell me all the time that they aren't doing their work for certain classes because they don't like their teacher. I've also found that the minute I show interest in a student's life, their attitude changes. It's honestly fascinating how important that connection is for a student's motivation.

A failure to connect with students due to the online learning experience this year may have caused educational gaps due to student apathy based on the lack of connection to their teachers.

Examining the remainder of survey responses, all other participants indicated similar experiences regarding a lack of relationship and observed effects thereof due to "social distancing, isolation, and being unable to communicate with certain students" according to Oscar's perception. Daisy stated a positive aspect of this identification of decreased relationship building, "It's enhanced the common threads of life-it's not as much 'us' versus 'them'." Her perception of her own empathy toward students increased due to this self-reflective identification.

Decreased Opportunities for Communication Support.

During 2020-2021, the online format for virtual learning did not offer the same type, nor frequency of opportunity to connect with students in Carbon ISD. Required middle school structure for virtual class meetings via Zoom or Microsoft Teams was dependent on campus administrators. During the fall of 2020, virtual class meetings were not required every day of the week for every subject. Each core subject met twice a week and elective subjects met once per week.

Discussion during individual interviews, Kristine expressed desire to incorporate as much student participation as possible into the classroom, yet student participation was lower than normal when online. Students were not speaking during online meetings as often as they would in a face-to-face classroom. However, Kristine tried to incorporate each student into the online conversations under her existing circumstances:

"I would always make every single student in the class talk at least once and that

> helped to build relationships and to be more comfortable in the zoom environment. But honestly, once school started, it became like in-person school. It was more challenging because of time and trying to navigate both in person and online class and grades and lessons…It's just..it's a lot. It's a lot."

Continuing the discussion, when asked how important including diversity of thought within the GT learning environment was, Kristine stated the following regarding including diversity of thought within GT student experiences:

> "I think it is crucial. They have to be challenged to think that there [are] different ideas and people think differently, and that is ok, and that one person isn't always right, or to stretch their thinking or add onto what they're already thinking, and just that opportunity to challenge, having that opportunity to challenge what they think maybe true or what they understand to be true about a topic or subject…to be challenged in that diversity of thought and the diversity of kids is crucial to being able to develop that."

Both Zoom and Microsoft Teams were available to educators in this district to conduct online interactions with virtual students as well as the combination of in-person learners and virtual learners. Unfortunately, overall student participation decreased during COVID when students participated in an online platform. Some students did not engage with educators. When present in virtual class meetings, students answered when called on by educators, but students rarely unmuted themselves to add to the class discussion. It is unknown if there are hidden rules or etiquette about staying muted as a classmate to be "respectful" of others speaking or maybe students were uncomfortable on camera in a classroom setting. Were they afraid of speaking for some reason? Future

research on this phenomenon should be studied to ascertain the causes behind the silence in online class meetings to provide support through future classes whether through in-person or online classes.

During the focus group discussion, Kristine's insights expressed the effects of online interactions with students throughout the year:

> I agree with, like, the communication aspect [of Oscar's input]. We're missing a lot of opportunities for them to have those conversations where we are able to, you know, facilitate that learning, the depth of the learning, and then the "how to respond" if you're not agreeing with someone, or if you, you know, say something that somebody doesn't like. What do you do?... really continuing to probe them to continue that deeper level of state game. And I think we missed that a lot in when you know we're doing things online.

During the focus group discussion, participants shared an intense concern for the lack of opportunities to guide students in the midst of communication. The decrease opportunities to listen to students, give students feedback in real time, and to offer alternative verbal examples of responses in socially receivable manner weighed heavily on all participants. This concern for training GT students in socially appropriate soft skill usage indicates the identification of another aspect of GT training that could be included within a dedicated GT curriculum.

Decreased Collaboration Opportunities.

The online format limited effective learning implementation and GT student interactions on multiple levels. Opportunities for collaboration have decreased during COVID-19 protocols due to the requirement of using an LMS for the administration of

lessons and therefore defined the present learning environment in new ways. The LMS was the repository and delivery of instruction and content to intentionally provide equitable access to all students whether in-person or online. Unfortunately, valuable aspects of student-student discussions and student-teacher discussion were unavailable via the LMS platform.

Daisy characterized GT student perceptions of collaboration within a pre-COVID history class as she reflected,

> I think they fed off of each other a lot in the classroom and they just don't get to do that anymore. They got excited about peer tutoring. They would get into, especially if you group them strategically, they would get into the collaborative side and that would spur their energy.

Nadia stated, that even though her students are usually open to class discussion through "warm ups" or "Think, Pair, Share" activities, that students have not had the frequency of collaboration as compared to a pre-COVID year: "This year, just the lack of opportunities to collaborate, not just to express themselves, but to hear each other, just be part of the conversation that academic conversation that's been that's been definitely lacking this year." During her individual interview, Daisy expressed concern for the current environment preventing collaborative interactions among GT students as she stated,

> Generally, your GT kids get into the competition and get into the, you know, the excitement of getting the big win and being first chair…and they're not getting that experience. And so, I think honestly, for them, this is not only been eye-opening, but it's made them a lot more reserved, which I hate to see for kids.

Among participant responses, the decreased frequency of collaborative opportunities

limited GT learning experiences. Unfortunately, there was little GT educators in their current situation could do to mitigate this deficit.

In my experience as a GT educator in this learning environment, I created opportunities for my GT students to discuss assignments, to collaborate group assignments, to present research findings or marketing concepts to "sell" their ideas to local government officials, however, these opportunities were not attempted until the spring semester beginning in January 2021. The majority of one of my in-person classes where most of my enrolled students were GT, aided my ability to facilitate group discussions, higher level thinking, and clarification for misconceptions or incomplete logical conclusions. I was able to scaffold with immediate feedback to support the needs of my students so they could correct errors and move forward in their thinking. Difficulty in students communicating with their online group members proved an issue during our first attempt at a group project. Online learners in that particular class were frustrated with having to coordinate with other group members and did not follow the instructions on the assignment. They chose to attempt the assignment alone. Occasionally one or two virtual learners messaged me before completing their assignment to as permission to complete their work independently. I allowed those students who requested this accommodation to do so in order to lower their anxiety level and provide equitable services with regard to pacing. They did not want to wait on others to complete a task or portion of the assignment. They stated that they had time management conflicts (i.e. doctor appointments, other work to complete, etc.) and needed to get their science done. The students who asked permission to complete their work independently consistently produced above average work so as an educator, I had no concern about the effort level

they would likely invest in their learning experience. During our subsequent attempts at group assignments, those attending in-person were more likely to choose to be part of a group rather than completing work independently. In the future as an educator, I do not think that I would allow students to repeatedly "opt out" of group work if I am required to facilitate online learning experiences. I would create a mixture of learning opportunities that require student interactions with clear objectives, leadership roles, and tasks with a focus on "team" accomplishments while other assignments would offer choice between group and independent work. Coordinating with other students was an additional step that online learners and in-person learners had to do to accomplish their group task. This acts of intentional communication, time management/scheduling, delegating tasks among group members, and completion of other tasks as assigned, are all relevant to future employment (business or military) as well as higher education endeavors students will initiate within the next few years. The goal of the lessons was to increase student interactions, student interest and student engagement. While they were provided, these opportunities were limited in frequency and in student participation due to student effort and communication with others. Other factors also affected student effort and student communication throughout the 2020-2021 school year.

Evolution of Unsafe Learning Environments.

Several factors prevented the formation of a "safe" learning environment that would normally allow GT students to take educational risks through honest dialogue. According to participants, honest dialogue happened less frequently during this school year than during any other school year prior to the pandemic. Nadia commented that normally her students offer their input readily, while Daisy shared that encouraging

conversation during Zoom class meetings was “difficult”.

Sharing her response about a foundational classroom environment, Daisy stated that “Students need a safe enough space that they can challenge what they’ve been told and what they’re learning and seeing. There’s a lot of silence in the dialogue.” Her perception about the student’s concerns were projected in her imagining of their possible thoughts during a controversial class discussion experience: “’I’m not going to offer dialogue because that would be encouraging conflict’, rather than working through an issue.” This indicates that student fear prevented risk taking in this example. While it is not possible to identify all roots of this fear, a few examples of possible negative student behaviors could be a factor. When asked what she believed caused students to refrain from conversation: “the racial tensions, the political tensions, the health tensions, the safety precautions-masks and social distancing?” her response was, “All of it”.

Looking more closely at other aspects of student culture that created an unsafe learning environment preventing risk taking, Kristine stated that social media has influenced many middle school students. In general, students have had increased opportunity to be active on social media since March 2020 when COVID-19 necessitated the closure of classroom doors. Students’ social interaction may have been virtual for some students who were not allowed to physically interact with friends and/or family members outside of their homes to prevent the spread of COVID-19. Kristine enlightened the focus group about a social media behavior she discovered from some of her middle-school students. Kristine stated that some of her students created spam accounts for the sole purpose of posting negative comments, hateful comments on other people’s posts on social media. The influence of social media may be considered an external factor,

however, according to participant responses, students brought the effects of experiences from social media with them into the classroom. Other external factors infiltrated the classroom in subvert and overt ways as well.

External Factors Influencing Participation.

Participants identified many other external factors that they believed influenced student participation and engagement during the 2020-2021 school year. Physical factors as well as abstract social factors influenced student engagement during COVID-19 protocols. By observing actual classrooms, the researcher observed classrooms and student-teacher interactions, and student-student interactions in various degrees of contact.

Physical factors that likely played a role in decreasing conversations in online or in-person class discussions included wearing masks and social distancing. In-person small group work occurring in a radius of less than six feet was prohibited. Social distancing was strictly enforced during the fall semester of 2020. Facial expressions were unknown due to mask wearing mandates. The lack of facial expression awareness prevented educators from reading a student's concerns, confusions, or understanding via body language. Physical supplies had to remain with one student. Students and teachers were not allowed to share school supplies at the beginning of the school year in any way. During the spring semester of 2021 educators had created systems of "sanitized" and "need to be sanitized" school supplies to provide necessary tools for processing while still upholding COVID-19 protocols. These were observed and identified physical factors that potentially influenced GT educator implementation throughout the school year.

Social factors that influenced student engagement ranged from global to

individual realms of influence. The global pandemic, the national stated of racial tension, the national presidential race, the state's governmental guidelines to administer health protocols, the state education agency's decisions regarding educational safety protocols, district directives for local campus implementation of federal, state, and health guidelines, as well as student's interactions with social media platforms were all identified by participants during the study. Kristine's statement about balancing online and in-person teaching, grading, and lesson planning could be inferred about the number and magnitude of the factors affecting students' participation in either online or in-person learning experiences: "It's a lot. It's a lot."

Multiple examples of decreased student participation were shared by participants. This section will highlight representative examples offered as a snapshot of effects of external factors on student participant. During the 2020-2021 school year, often students did not participate in conversations about personal events, educational content, or current events when asked to participate verbally when present in the classroom or in an online meeting. Noted early on, students were extremely quiet at the beginning of the school year. Their interactions were severely limited. When in the building, I personally noticed a marked decreased volume in the halls during transitional passing periods of time as well as within the classroom. Rarely did students request help verbally or by raising their hand.

Within the context of U.S. history class discussions, Daisy stated during the focus group, that GT students did not contribute to controversial topics during both online meetings and in class environments. Her belief was that students were afraid to discuss conversations that could have perceived negative consequences either within or outside

of the classroom. Controversial topics that were mentioned as possible factors in prevented included discussions about racial tensions, political tensions, or health tensions. Other participants agreed with affirmative nods during the focus group discussion following Daisy's statement.

Circumstances caused by specific COVID-19 health concerns, as well as external factors outside of health concerns influenced the learning environment directly and therefore, limited GT educator implementation of GT student learning experiences in multiple ways during the 2020-2021 school year. <elaborate/quote>

Unforeseen Opportunities and Positive Outcomes.

GT educator reflected on the COVID-19 impacts on their implementation of GT services that painted a picture of identified issues, concerns, and opportunities. When the school year is extremely different than every year prior, educators had to adjust for "huge change and lots of adjustments" according to Kristine. Nadia stated that, "I had to reinvent myself" due to COVID. Daisy noticed something interested when she did some self-reflection during her interview:

> I will tell you that in this COVID nightmare, I have realized that I was carrying the burden for a lot of these kiddos. As flipped classrooms and active learning do put the onus back on them and it's made me realize I need to personally, as a teacher, need to be a little bit more of a facilitator and less of a spoon-feeder. I feel like that. I really do.

I also had to revisit my role as an educator and reflect on what I require, what I need to do differently, which best practices should be part of my daily expectations for my students, and how I will implement them once I know what our next school year has in

store for education in general. This internal monologue was pivotal for me as a veteran GT educator. My takeaway question became, “How can I challenge my GT students and support their ownership of their learning?”

In addition to positive personal reflections, GT educators identified multiple characteristics of GT student learners both in general and by the latter part of our COVID learning experience in May 2021. Based on the literature and responses from participants, GT students’ inherent determination to learn, grow, and challenge themselves likely led to the positive outcomes noted by participants in May 2021. Educator perceptions of GT student characteristics shared during the focus group discussion were supported by original perceptions provided during the individual interviews during January 2021. Daisy shared her perception of GT characteristics during her individual interview near the beginning of the spring semester:

> “I feel like a lot of them have just kind of… not giving up, because they’re GT- they are going to challenge themselves, but I don’t think that they enjoy it as much as they used to...They’re lacking that interaction. And they’re lacking that challenge and that energy.

Nadia characterized GT learners as those who “thought outside the box, stimulated themselves” to continue learning and asking questions. GT learners have shown their resilience as they have proven their way to the other side of COVID-19 with newfound skills and strategies perhaps because they “thought outside the box”. During the focus group discussion, Daisy identified various GT student characteristics that emerged by stating that GT students were challenged by the “pivot and flexibility that COVID has provided.” Kristine responded quickly to Daisy’s input as she noted GT students who

overcame COVID-19 barriers and acquired grit/perseverance and resourcefulness: “I agree. I also see that they are becoming more resourceful and able to, you know, navigate the systems that we have and, you know, push through the issues that come up and find different ways to accommodate…” Their ability to accommodate could be a result of GT students’ innate “creativity” noted by Nadia during her individual interview.

Later during the focus group discussion, Nadia responded about her perceptions her GT students’ soft skills:

> Well, one of the soft skills, you know, is self-motivation and time management. And I think that has been a huge amount and that a lot of kids have climbed on and just growing up to the challenge and just flourished throughout the year. And some kids have been through the whole valleys and peaks throughout the year, so, I think they still are learning how to do this.

Oscar brought up documentation of GT students’ soft skills on report cards. He stated that his children attend private school and have notations for their interpersonal skills. However, he noted that in public school,

> We stop measuring that stuff. And I think it would help all students. But think about the development our gifted and talented kids would get on all of everything if you just mentioned it. If that could show up on a report card, we can monitor growth and development over the year. ‘Hey, what did so and so think about what their teachers would have next year. ‘Hey, so and so struggles with collaboration. So and so struggles with thinking creatively in science or in math.

His idea to monitor soft skills for individual growth could be part of the curriculum guide for GT educators to communicate progress to parents

Theme 3: GT Professional Development

The third major theme is that GT Professional development should include cross-curricular critical thinking application strategies. In order to create a collection of rich resources for GT educators, participants stated that GT PD would better prepare educators with some changes. Educators expressed a need for various changes regarding GT PD qualities.

At the beginning of the study on survey responses, participants rated their district GT PD effectiveness at a "2" on a scale of 1-5 with 5 representing "extremely useful". and a "1" representing "not at all useful". Their perception indicated that the district GT PD is not currently meeting the needs of GT educators. While this research involves only a small sample of participants, these veteran educators collectively average 13.5 years of public-school experience with a collective 10.75 years of experience educating GT learners. Their perceptions about GT PD have merit even in such a small group because these educators have participated in GT PD in this district for several years.

The most prevalent response noted during interviews and the focus group discussion revolved around the need for cross-curricular GT PD. During the focus group discussion, Nadia stated, "I would like to see more interdisciplinary activities. I feel that sometimes kids can be bored by just our subject. They could see the connections a lot faster than the rest of the kids." All other participants agreed with Nadia's perception about needed qualities of GT PD verbally and with affirming head nods. The accelerated understanding of GT learners is a characteristic that is prevalent among precocious GT learners (Reis & Renzulli, 2010; Renzulli, 2012; Rotigel, 2003). Providing specific tools to help GT educators facilitate cross curricular application of GT learning is supported by

literature due to the nature of unique GT learner needs. (Bicknell, 2013; Duquette et al. 2011; Reis & Renzulli, 2010; Renzulli, 2012; Weber & Stanley, 2012; Young & Balli, 2014).

Closely related to the need for cross-curricular GT PD was the need for a variety of strategies that any teacher could implement to promote critical thinking in ways GT students could relate to the thinking at hand. Oscar noted multiple times during his individual interview and during the focus group that GT educators need to challenge GT learners intellectually to keep them engaged in the learning experience. Without intellectual engagement, GT students are not "stimulated" as Nadia shared, and may choose to become "disruptive" as Oscar noted. With additional strategies to support critical thinking in the GT learning environment, GT educators will be better equipped to effectively engage students and increase student interest.

Specific requests for future GT PD were explained by Daisy during her individual interview. Daisy stated indicated a need for 1) more GT opportunities, 2) more variety in the GT PD, and 3) more GT human resources to provide GT PD:

> "more opportunities for GT learning. I mean, you know, they offer a very limited scope…not only is the subject matter limited, and that you've got three different things to choose from, but the times. They are also very limited…We are a pretty big district. Can we not put some more people into those positions?...A district needs to put more resources into that."

Other participants affirmed Daisy's perception of need for additional GT PD offerings. As a practitioner in this district, I can understand and agree with Daisy's concern for the limited number of GT PD offerings. Pre-COVID, GT PD sessions would be "full" almost

as quickly as the session was available. Speaking with GT specialists during this research, one stated that if any GT sessions were “full”, that all who signed up on the “waitlist” would be accommodated. However, this is an unwritten, hidden rule that is not common knowledge to GT educators. At the time of this study all GT PD was only offered through an LMS online platform either synchronously or asynchronously. Online GT PD can definitely accommodate more GT educators than physical space as individuals would be attending from various locations. It is unclear whether future GT PD will be offered in person or exclusively online.

Carbon ISD employs over 4,000 teachers to educate over 59,000 students. At the time of this research, the district supported the GT teachers with three GT specialists to provide the majority of the GT professional development 6-hour updates required by state law. In order to support GT educators, participants expressed a need for cross-curricular PD that provides application strategies for critical thinking that still allows students to have choice so that student interest is maximized. The GT PD should also provide meaningful collaboration strategies in both in-person and online settings to meet the needs of students in all learning venues since 2021-2022 will also be a work-in-progress as we recover in a post COVID-19 protocol environment, while campuses “reinvent” themselves once again. Effective GT PD will support GT educators, GT students, and can help bring GT parents closer to their child’s learning experiences as well.

Theme 4: Parent Involvement

The fourth major theme is that GT parents should be more involved at the secondary level to effectively communicate valuable information about GT individual student qualities, expectations, and progress throughout the year among GT parents and

educators. Creating an open line of communication that supports GT students seems a logical step in best practices for educators as they begin a school year. During COVID-19 protocols some parent interactions were limited by time constraints as educators facilitated face-to-face classrooms and online classrooms simultaneously. In addition, some parents did not have an active email to receive student progress updates. Other parents did not return educator communication.

Nadia explained her intentionality in creating an "open line of communication" with GT parents at the beginning of the school year by sending a parent survey to gather input about their GT child. During her individual interview and during the focus group Nadia shared how she opened a line of communication with parents in order to discover valuable insights regarding their child's strengths and weaknesses. Oscar added that teachers should not have to go through each cumulative folder to find out which area of giftedness was identified within a student. By communicating with GT parents early in the school year, GT educators would acquire more information than a cumulative folder provides. GT parents as resources is valuable because all participants agreed that their ability to connect their GT students to their learning would increase if they were already aware of students' strengths and interests.

The second aspect of parent involvement identified by participants related to the pre-conceived expectations and misconceptions GT parents and GT students come to middle school with from elementary school. Participants identified and explained the need address misconceptions and GT expectations as soon as possible when the reach the secondary level. Two issues that GT educators and GT parents need to discuss are 1) clarifying the differences between elementary school and middle school expectations, and

2) reframing student "success" apart from student grades.

When participants were asked "What do you wish parents of GT learners knew and how you help them understand that?", their answers were very similar. All participants believed that GT parents should be made aware that "failure is a good thing" during middle school and that "failures are growth opportunities". Participants believed that GT parent should be made aware that "being GT does not mean a student always makes one hundreds." Participants explained that some GT parents have concerns about student grades over student growth. Clarifying to parents that grades don't equal potential or student growth was a desire for all participants as observed by affirmative nods and "yes" from all other participants during the focus group discussion.

The third aspect of parent involvement need identified by participants was continual communication between GT educators and GT parents to share individual student progress. A unique situation occurred as conversation during the focus group discussion turned to the topic of GT parent involvement in Carbon ISD. Participants were only asked if they had their 6-hour GT updates; they were not asked if they had children who qualified for GT services. However, during the focus group discussion, Nadia and Kristine stated that they are parents of one or more GT student. Perspectives from GT parents added to the research because these educator participants both have children who are currently identified as GT in Carbon ISD and receive GT supports at the elementary, middle school, and/or high school levels depending on the child. Kristine has younger children who attend elementary school. Nadia has one child who is currently attending high school and one who is attending middle school in this district. Daisy stated that their children attended and graduated from this district having experience with Advanced

Placement (AP) high school educators.

Questions Kristine expressed as a GT parent were, “How is my child being challenged?” or “What is different that they're doing that other students might not?” These questions are valid concerns from GT parents that could guide GT educators as they examine their own implementation of GT services.

Nadia and Kristine indicated that there was adequate communication and support between elementary teachers and the GT parents. They stated that students at the elementary level were “pulled out for GT enrichment” to another classroom and participated in a “showcase” at the end of the year (in a pre-COVID year). The participants’ perceptions of their middle school experience with their children’s GT teachers indicated a decreased level of communication as compared to elementary school and depended on the middle school teacher.

Nadia stated that there was communication at the middle school level. She knew how her child was being challenged based on her observations during interactions with her child watching them research and prepare presentations. In contrast, Nadia stated that there is little to no communication with GT parents at the high school level. Daisy agreed with Nadia’s experience. GT parent perception of high school teachers about teaching GT students in advanced academic classes were that the high school teachers do not care whether students succeed or not, but rather have a “sink or swim” attitude toward student participation in their courses. Daisy’s description of the scenario began with negative intonation, but their final statement about the strategies of the high school teachers who may conduct their classes with a “sink or swim” method of success indicated that this strategy forces students to “work harder” if they decide to persevere and continue in that

course. Therefore, this high school GT teacher strategy is “proof of challenge for GT students”.

Interestingly, there was little discussion about middle school communication specifically. The general understanding that parent involvement at the middle school level is analogous to a pendulum swinging depending on the group of students and parents: 1) either parents do not communicate with GT educators or 2) parents who communicate frequently for various reasons. The majority of the conversation addressed the positive communication experience GT parents experienced within their parental elementary school experience and the negative communication experience of GT parenting in high school.

Gathering GT parent perspectives was an unintentional and fortuitous aspect of this study. Through the honest dialogue of GT educators, their responses confirmed and clarified that GT educators and GT parents should work as a team to support GT student learning experiences in all subject areas to 1) create an open line of communication to support GT learners, GT parents, and GT educators, 2) address and clarify expectations and misconceptions GT parents and GT students may bring with them from elementary school, and 3) provide ongoing individualized information on student progress both from GT educators as well as from GT parents who have a unique insight into the life of their adolescent.

Researcher Experience

As a practitioner, I designed and built an enrichment course in our Canvas learning management system (LMS) for interested in-person learners and online learners during the course of this research. Participation in this optional enrichment course was an

example of parents, students and GT educators working together as a collaborative team. The purpose of the enrichment course was to offer students who felt unchallenged by the current format or level of content to provide each member an avenue for designing and creating their own passion project using the framework from Genius Hour by Andi McNair. While the design focus of the course was aimed at GT students, the enrichment course was offered and communicated to all students through their Canvas LMS dashboard and to parents through the principal's email newsletter. Eight students' parents signed up their teenagers for the course. Four of the eight participated in online zoom meetings to facilitate the creation of a passion project. The four participating students (one seventh grader and three eighth graders) displayed self-determination by attending the majority of the optional zoom meetings offered. Three participating students were coded as GT and the fourth student exhibited accelerated levels of technology application far beyond their peer group, however, was not coded as GT at the time of the research. Prior to requesting enrollment in the Genius Hour course, parents discussed the course with their child and filled out a permission form online to allow students to participate. Some parents also contacted me to clarify dates or times for upcoming Zoom meetings as needed during the semester.

In general, the course sparked student interest to connect one or more of their passions to a community outreach or a type of service or product that could benefit others. Even though we did not have enough time during the semester for students to create final products, student participants documented each other's emails (as well as my email) to collect resources for future projects and/or the continuation of their first project. These students seemed to thrive on the creative relevance of their projects and

discovering how to make it functional reality for the community or the world. We discussed “how”. During our Zoom meetings, our discussion centered on how their idea would become concrete and useful to the rest of the world both with and without an expert in the fields of interest.

The significance of this additional learning opportunity is evident in the GT students who chose to actively participate as often as possible. While they needed a guide through the thinking process of the Genius Hour structure, students showed genuine interest in finding ways to connect their own passions to the rest of the world. By asking questions, discussing ideas, researching before, during, and after the meetings, and beginning dialogue with experts, students showed evidence of self-determination, perseverance, self-discipline (since all meetings were after in-person school was released), an interest in a personally relevant topic, offerings of their feedback to other members of the group and practiced interpersonal communication skills as they found the words and phrases to explain what their ideas were to others for the first time which was quite difficult for some. This opportunity became the spark that a handful of students took advantage of. I hope that the students in the course continue to use that spark to continually ignite new fires in their imagination.

Summary

In her interview Nadia stated that “these two years of junior high are very, very foundational” describing the importance of the content and skills acquired and “honed” in middle school. Carbon ISD structures their middle school as 7th and 8th grade served on junior high campuses. Nadia’s statement represents the crux of all participant responses shared throughout this study: The learning experiences of GT students at the middle

school level are integral for future advanced intellectual growth at the higher educational levels. It is the role of the middle school GT educator to support GT students with skills they can practice in middle school and bring with them to high school. Therefore, middle school GT educators' learning experiences are extremely beneficial as a research study as the baseline for future growth. Learning experiences were definitely impacted by COVID-19 and the circumstances attached to this pandemic.

Middle school GT educator perceptions of the COVID-19 impacts on their implementation of program services were gathered, analyzed, and categorized. The following four themes emerged as participants shared their experiences: 1) GT educators need a dedicated GT curriculum that promotes the application of critical thinking skills in personally relevant ways to support GT students more appropriately; 2) Multiple factors hindered the GT learning environment related directly and indirectly to COVID-19 circumstances, but this novel environment created opportunities for GT student growth; 3) GT Professional development should include cross-curricular critical thinking application strategies; and 4) GT parents should be more involved at the secondary level to effectively communicate valuable information about GT individual student qualities, expectations, and progress throughout the year among GT parents and educators. These four themes summarize the topics that pervaded the conversations I experienced with veteran GT educators over the spring semester of 2021. Each participant response provided insight into a unique experience in the novel circumstances of COVID-19 protocols to shed light on their implementation of GT services during the 2020-2021 school year. Challenges and opportunities were identified regarding both pre-existing issues now exposed by COVID-19 protocols and residual challenges and opportunities

created both directly and indirectly by COVID-19 protocols. This section will examine this data for its meaning, significance, implications, and also to guide recommendations for GT educators, GT parents, GT administrators, and educational leaders as a whole.

Chapter V

Analysis and Recommendations

"No matter what happens, or how bad it seems today, life does go on, and it will be better tomorrow."

—Maya Angelou

Introduction

This study explored the perceptions of middle school GT educators regarding impacts of COVID-19 protocols on their implementation of GT services. The novel circumstances caused by the COVID-19 pandemic created unique learning environments in both in physical classrooms and in virtual classrooms during the 2020-2021 school year. Little research has been conducted on the middle school level regarding GT educator perceptions about their experiences during COVID-19 at the time of this study. Immediate and drastic changes necessary to mitigate the spread of COVID-19 forced educators to "re-invent themselves" and their previously effective teaching strategies in order to design functional and engaging activities embedded in an online LMS platform. At the onset of the study, all participants expressed anxiety while concurrently implementing online and in-person experiences, denoting a lack of time when teaching both in physical classrooms and online simultaneously. Multiple aspects of implementation of learning required "huge changes" in implementation of learning experiences for all students according to survey responses. GT students were directly affected by these changes required as a repercussion of the COVID-19 pandemic.

At the beginning of the study, participants stated that GT students were disengaged and/or completed work using a "checking the box" mindset, completing minimal work to move onto the next task rather than exploring a presented topic to learn deeply. This type of surface level learning seemed to be prevalent throughout participants' student populations during the individual interviews. Conversely, by the end of the study, participants reported that some GT students flourished in the midst of their situation, applying personal "grit and perseverance" that propelled them to excel with regard to accessing and manipulating technology to accomplish learning objectives.

In conducting this research, I identified a consistent statement of need by GT educators for a specific GT curriculum to support GT student learning. General academic success of GT students may cause GT educators to overlook individual GT student needs increased rigor, depth, or complexity whether intentionally or unintentionally. This statement of need for a GT curriculum correlates with the literature regarding differentiated GT educational needs (Reis & Renzulli, 2010; Renzulli, 2012; Rotigel, 2003; Young & Balli, 2014).

Based on interviews with district GT leaders in Carbon ISD, this district's strategic plan for restructuring the GT program to align with state provisions more effectively for gifted and talented learners began five years ago. GT students previously served at the elementary school level will enter middle school during the 2021-2022 school year. To ensure continued GT services provided at a comparable level with their elementary GT experience, GT leaders stated that they had already begun planning and designing upcoming changes to the secondary level services prior to the COVID-19 pandemic. At the time of the interviews conducted during April 2021, no details

regarding secondary GT restructuring were available. The following recommendations may inform future restructuring plans to benefit GT educators and the GT students they serve.

Recommendations for GT Educators

In my 23 years of experience providing direct instruction to both gifted students who were coded as GT and those who were not, there has been an overwhelming need for intellectual challenge and opportunities for students' intellectual growth. Growth requires reflecting on experiences and using innovative strategies that may have never been done before in order to stretch oneself beyond current levels of understanding during novel circumstances. To provide needed intellectual stimulation, GT educators must reflect upon their lesson design, implementation, and delivery to assess the presence or absence of depth and complexity within their own classroom GT learning experiences. GT educators should create lists of successes to celebrate, and areas of needed growth based on their critical self-reflection. Once GT educators identify their implementation strengths and weaknesses, GT educators should collaborate and research to determine best practices for addressing the needs and retaining the strategies that proved successful. The self-reflection conducted during this study revealed concerns in various areas of design, implementation, and delivery of GT services. GT educators' identification and admission of need for growth indicates wisdom of a life-long learner who is determined to improve oneself. When afforded a time to reflect, discuss, collaborate, research, and plan new lessons, GT educators can be empowered to

Based on results from the study, my reflections as a veteran educator and researcher, and the literature itself, it is my recommendation that GT educators critically

reflect on their current lesson design, strategies, and expectations conducted under COVID-19 protocols and how multiple factors impacted their implementation of GT learning experiences during the 2020-2021 school year. Perhaps this self-reflection will provide insight into areas of professional strengths and needs.

With any new awareness, educators should seek out needed resources. Collaborating with other educators will help develop a collective GT resource toolbox for GT educators. Other educators provide valuable knowledge and strategies to provide intellectual, social, and emotional support for GT students. After critical self-reflection and the identification of any needed areas of growth, GT educators should find engaging ways to challenge GT students using relevant critical thinking strategies during conversations, activities, and assessments.

Regarding GT educators and their relationship with their GT students, viewing each interaction with a GT student as a learning opportunity for the educator as well as the student will benefit both teachers and students. Knowledge regarding individual students is a valuable resource that informs lesson planning and implementation of future learning experiences.

GT educators must intentionally create positive, open communication with GT parents from the beginning of each school year to cultivate a support system for GT students. It will take extra time to contact GT parents. Time and effort spent forming relationships with GT parents should be viewed as an investment in GT students. GT parents may provide invaluable insights to GT student strengths, weaknesses, likes and dislikes that lay a foundation of information that a cumulative folder simply cannot describe or explain. I encourage educators to find value in every GT parent interaction as

they develop a team support for GT students. In addition, GT educators should strive to gently inform GT parents about differences between any elementary and secondary level GT expectations to clarify and remove misconceptions to prevent frustration and confusion.

With the implementation of these recommendations GT educators can create open lines of communication with GT students, their parents, and provide a positive learning experience for all who are connected to that classroom.

Recommendations for Parents

Parents of GT students often have valuable insights about their child's strengths and weaknesses. Communicating their understanding of these qualities to the GT educators investing in their GT child can provide a foundation that springboards educators into challenging that adolescent meeting them where they are in terms of their skills academically, interpersonally, introspectively, socially, or emotionally more quickly than without parent insight. Based on this study, I encourage parents of GT students to openly share with GT educators any appropriate insights into their adolescent's interests and dislikes along with their strengths and weaknesses to aid educators in meeting their child's unique individual needs. This avenue of communication could be a powerful team resource in supporting their GT student during the challenges of middle school and beyond.

Regarding GT parent-student relationships, parents can conduct frequent conversations to inquire about what their GT child or adolescent is learning, how they are investigating a topic, what they are creating, or how they are proving their understanding at the moment. Parents can lean into their child's learning experiences using this type of

questioning in a genuinely curious manner to cultivate an open line of communication with their teenager. Even though teenagers may not want to have conversations immediately or consistently, the interest that a parent shows in their child's education may foster a stronger sense of value for their learning. Open parent-GT teenager conversations have the potential to create an open and supportive communication throughout their education.

Beyond the classroom or home, parents of GT learners should take advantage of any educational materials or workshops provided by their local campus and district to acquire additional information and strategies that will support their child effectively throughout the educational process. If a GT student's campus does not readily offer educational materials or workshops for GT parents, it is my recommendation that parents request information or training to meet their needs as GT student advocates. GT educators, counselors, GT administrators on campuses and at the district level may have specific resources to guide parents through the GT program during middle school and into high school. The act of requesting resources can bring awareness of a need that some campuses or districts may be unaware of. GT parents who are informed are more equipped to stronger advocates for their GT teens.

Recommendations for District GT Administrators

Based on the literature (Little, 2018; Reis & Renzulli, 2016; Renzulli, 2010), a GT curriculum supports GT student learning by providing a structure and foundation to GT educators to encourage GT learning opportunities. Effective learning opportunities allow students to study personally relevant and challenging information in the company of like minds who can energize each other to produce quality projects. District

administrators should provide GT educators a framework to facilitate effective learning opportunities in the form of a GT curriculum to GT students toward their potential. At the district level, it is my recommendation that district decision makers design, create, and provide a GT curriculum that promotes student application of higher-level critical thinking skills in relevant and meaningful ways according to best practices in the literature based on the findings during this study. An appropriate GT curriculum should be cross-curricular and applicable in all subjects as well as support CRP within classroom experiences.

In addition to providing a specific GT curriculum to GT educators, districts should offer a variety of professional development opportunities that provide cross-curricular strategies using critical thinking skills that engage GT students in the creation of meaningful products and in the promotion of student ownership of learning. Offering GT educators exemplars of cross-curricular strategies would benefit GT educators as they apply strategies acquired during GT PD to design and prepare their students' learning experiences. Both traditional and online and strategies and examples of practical application of provided techniques should be incorporated into professional development sessions to better prepare GT educators for various methods of learning opportunities.

Recommendations and Implications for Educational Leaders

Educational leaders can support GT students and GT educators by providing the Advanced Academics Department the funding and personnel necessary to design and create a specific GT curriculum at the middle school level to provide GT students with 1) collaboration and leadership opportunities, 2) increased intellectual challenge using critical thinking, and 3) student choice opportunities offering personal relevance,

therefore promoting student interest and engagement.

Providing specific funding for the GT program in public school districts is supported by a federal requirement through newly adopted House Bill 1525. The effective date for the implementation of specific funding for GT programs is 2022-2023. This allows time for educational leaders to decide how they can best support their overall GT programs and services. Creating a GT curriculum that meets the requirements noted by participants will support GT student learning experiences and the GT educators who must facilitate them.

Once the GT curriculum is available, continued financial and personnel support will be required to provide adequate professional development opportunities that meet GT educator needs to better prepare educators as they seek to provide appropriate and equitable learning experiences for GT students according to federal law, state law, and district goals and objectives. Professional development should be offered frequently with expectations of GT educator reflection, application, and collaboration through professional conversations, implementation within the classroom, and communication with students and parents as applicable. Results of this study demonstrate the importance of offering professional development to support educators, to support GT students, to become knowledgeable about the needs of GT students, and to inform instructional practices to meet those needs.

It would also be beneficial for educational leaders to offer professional development sessions regarding building positive relationships with parents and how to equip GT parents with the knowledge they need to support their child's growth. These GT PD sessions could be recorded and offered in asynchronous formats to provide

flexibility for educators. Professional development opportunities regarding parent involvement should be made available to all educators throughout the school year rather than occasionally.

In addition to creating PD for GT educators, educational leaders must research and create ways to best support their GT parents in tangible ways, whether through seminars, reading materials, or liaisons or support from campuses. Literature supports parent involvement in a variety of ways. Unfortunately, parents are unaware of the myriad of possibilities that they may need or that may already be available to them. Educational leaders have the opportunity to build strong parent relationships with their school district by clearly communicating GT parent resources to parents of all levels of GT students-elementary, middle school, and high school.

Educational leaders drive the focus and perceived value of educators, students, and their families. GT students, parents, and educators all deserve and require district support. Funding and personnel allotted for GT programming will provide evidence of their support for the GT community. By financially and physically supporting GT programming GT students, parents, and educators can believe they are highly valued by their district leaders. When stakeholders believe they are valued, the support for their district will increase and form a stronger connection among families, students, and educators. Educational leaders must view their GT educators as essential to the health of their local district so much so that their efforts in supporting the GT community causes educators to individually realize how valuable they are to their district leaders. Without these leaders' support of the GT program, GT students will suffer and GT parent and GT educator faith in their district may wane.

The health of the whole district depends on the effectiveness of the myriad of programs serving students in public school. Federal, state, and local laws, policies, and procedures mandate specific supports for GT students. Meeting such requirements are educational leaders' responsibility and privilege as they promote the potential of GT student growth.

Limitations

This study was conducted with input from four middle-school GT educator participants employed in the same large public school district in south central United States. Limitations of the study may be that these educator perspectives may vary from other educator perspectives in smaller school districts. The participants in this study were a part of a purposeful convenience sample mindfully chosen based on a wide variety of their cultural backgrounds as well as a variety of personal and educational experiences. Therefore, their perceptions were based on an average of 15.4 years teaching in public schools. The participants' significant time in the public school environment provides insight that may be relatable for other large public school districts and other GT educators with similar years of experience, but could prove different for educators with little or far more experience in the classroom. Even within the same state, the number of variations learning implementation that occurred within public schools during COVID-19 protocols were unique to each school district and may not be fully reflected within this study.

Recommendations for Future Research

Additional research is needed to examine student perspectives, parent perspectives, and administrator perspectives, and other grade level educators to gather a more holistic picture of the impacts of COVID-19 protocols on other stakeholders.

Consideration for studies regarding the effectiveness of LMS administration and implementation for online learning is as compared to in-person learning would be beneficial for upcoming decisions in district learning format offerings as the procedures of education morph over time. Longitudinal studies on the effect of the COVID pandemic protocols from Spring 2020 through Spring 2021 should be conducted to determine any lasting effects of educational gaps in student learning as well as any positive outcomes that may arise due to increased student resourcefulness, perseverance, and increased mastery of technology due to the novel learning environments provided during the COVID pandemic. In addition to the identification of educational gaps, students should be interviewed to determine whether their perspective is one based in a "growth mindset". Learning more about these major concerns (online learning vs. in person learning, educational gaps, and growth mindset thinking), would also add to the research regarding effects of COVID-19 protocols on middle school student learning. If conducted, it would be interested to discover GT student perceptions of their learning opportunities and their beliefs about how it will affect them in the future.

Based on evidence from this study and previous literature conducted during COVID-19 pandemic, future research should include studying educator and student stressors and responses created by the COVID pandemic as well as their long-term effects. During initial interviews conducted in January of 2021, I observed consistent heightened stress and anxiety among participants' responses by observing facial expressions, body language, intonation, and tone. However, participants' overall anxiety and stress level seemed decreased during the focus group discussion conducted in early May as evidenced by laughter during the conversation, smiling, intonation, and general

demeanor. Regarding student anxiety, participants stated that students were “afraid” to contribute to discussions and chose not to talk particularly at the beginning of the school year indicating an increased level of student anxiety or fear. Ongoing diminished student participation school year and its causes and effects warrants further investigation. These future studies will add to the collection of literature conducted as a direct result of COVID-19 in education.

Conclusion

GT educators have unique access to GT learning experiences necessary to inform GT program decision making. Post-COVID education requires pedagogical reflection by GT educators and leaders to evaluate current GT implementation to provide more effective GT services considering challenges experienced during COVID-19 protocol administration. As observed by GT educators, some GT students excelled under novel circumstances acting on their intrinsic motivation and grit, yet other GT students completed minimal tasks. Future GT services must address individual GT student needs by evaluating possible educational gaps as well as providing scaffolded intellectual challenges. GT educators require tailored GT professional development supported by funding and personnel from GT administrators and GT decision makers at local levels. Unique GT students deserve individualized support.

My professional desire as a researcher, and leader is to see educators equipped with the resources they need to create positive, challenging, and productive appropriate GT learning environments that are equitable for the GT student population’s unique needs. This research study provides evidence to equip GT educators more effectively through awareness and tools appropriate for GT program services. Future research

regarding the long-term effects of the online delivery of content for GT learners as well as long-term effects of COVID-19 stressors will benefit all educational stakeholders as education continues to evolve and emerge from the shadow of the COVID-19 pandemic and the protocols necessary to mitigate its movement through populations.

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Appendix A

Approval and Recruitment

Figure 1-IRB Approval

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH
Institutional Review Boards

APPROVAL OF SUBMISSION

November 9, 2020

Michelle Leverette
mlleverette@uh.edu

Dear Michelle Leverette:

On November 3, 2020, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Gifted and Talented Middle School Educator Perceptions of Program Experiences in a Large Urban School District
Investigator:	Michelle Leverette
IRB ID:	STUDY00002628
Funding/ Proposed Funding:	Name: Unfunded
Award ID:	
Award Title:	
IND, IDE, or HDE:	None
Documents Reviewed:	• Appendix C-Member_Checking.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Appendix B-Individual Interview Questions_Follow-Up Questions Embedded.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Appendix D-Panel Discussion Questions.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Appendix E-IRB Email for Participant Recruitment.pdf, Category: Recruitment Materials; • Appendix A-Initial Survey-Participant Background.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Consent_Form_Leverette.pdf, Category: Consent Form; • Leverette_Michelle_HRP-503_11-09-20.pdf, Category: IRB Protocol;

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH
Institutional Review Boards

Review Category:	Expedited
Committee Name:	Designated Review
IRB Coordinator:	Maria Martinez

The IRB approved the study on November 9, 2020; recruitment and procedures detailed within the approved protocol may now be initiated.

As this study was approved under an exempt or expedited process, recently revised regulatory requirements do not require the submission of annual continuing review documentation. However, it is critical that the following submissions are made to the IRB to ensure continued compliance:

- Modifications to the protocol prior to initiating any changes (for example, the addition of study personnel, updated recruitment materials, change in study design, requests for additional subjects)
- Reportable New Information/Unanticipated Problems Involving Risks to Subjects or Others
- Study Closure

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

Sincerely,

Research Integrity and Oversight (RIO) Office
University of Houston, Division of Research
713 743 9204
cphs@central.uh.edu
http://www.uh.edu/research/compliance/irb-cphs/

Figure 2-Recruiting Email Letter

Hello Prospective Research Study Participant,

This is an invitation for you to participate in a research study. I am conducting this study to complete my dissertation for the fulfillment of my Doctorate in Professional Leadership with an emphasis in Social Education at the University of Houston. This study has been reviewed by the University of Houston Institutional Review Board.

The purpose of this study is to examine and better understand the perceptions of middle school Gifted and Talented (GT) educators regarding explicit and implicit factors that influence and impact how they offer learning experiences to GT learners under COVID-19 protocols.

We expect that you will be in this research study for six weeks.

If you agree to participant in this research, you will engage in the following:

- ***Sign a consent form documenting your agreement to participate in this study***
- ***1 survey regarding teaching experience***
- ***2 individual interviews***
- ***1 panel discussion interview***
- ***Interact with the researcher for all meetings via virtual meeting platform.***

If you are interested in participating in this research study, please contact me via email or phone to discuss providing your consent and ask any questions you may have regarding your participation.

Michelle Leigh Leverette
Doctoral Candidate
University of Houston
Email: michellelleverette@gmail.com
Phone: 817-925-2888

Figure 3-Consent Form

Consent to Take Part in a Human Research Study

ion or questions, follows within the remainder of this document under the "Detailed Information" heading.

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- You are "up date" on your 30 initial GT hours and/or 6

participant's background as an educator, an initial interview, a member check interview to confirm

Consent to Take Part in a Human Research Study

There are no known risks associated with this research study. You can assume the possible benefit of validation of your professional perspectives and opinions by sharing your thoughts and opinions, expressed confidentially, and analyzed to be presented to other educators, academics, and stakeholders with the possibility of increasing awareness of needs for GT educators and/or students as well as the possibility of improving a current policy or procedure. You will receive $5 gift card as compensation for participation.

Detailed Information:

The following is more detailed information about this study, in addition to the information listed above.

Why is this research being done?

Gifted and Talented (GT) learning experiences look different at varying levels of public education. Each level (elementary, middle school, and high school) address academic, social-emotional, and physical needs of GT students they serve. The purpose of this research study is to gather professional perspectives of middle school level Gifted and Talented (GT) educators to discover a better understanding their supports, needs, and other factors that influence their implementation of GT learning experiences.

How long will the research last?

We expect that you will be in this research study for up to 8 weeks during the spring semester. The initial survey is estimated to take between 20-30 minutes to complete online. The initial participant interview is estimated to take 30- 60 minutes via Microsoft Teams application. The member check interview is estimated to take between 20-45 minutes via Microsoft Teams application. The panel discussion, also performed on Microsoft Teams, is estimated to take approximately 60 minutes depending on participant responses.

How many people will be studied?

We expect to enroll about 4 people in this research study.

What happens if I say yes, I want to be in this research?

- Participants will sign the consent form if they choose to participate.
- Electronic Initial Surveys will be distributed during the second week of January through participants' preferred email. The survey is estimated to take approximately 20-30 minutes to complete.
- Initial interviews will be scheduled after the survey is complete via email or a phone call. Interviews will be determined at the convenience of each participant after the end of their contract hours on a weekday or during the weekend as agreed upon by participants and researcher.
- The initial interview is estimated to take approximately 30-60 minutes. However, this estimate depends largely on each participant's responses.
- During the initial interview, participants will be asked several questions by the researcher about their current experiences as an educator, and more specifically, as a Gifted and Talented teacher.

Consent to Take Part in a Human Research Study

- Participants may choose to skip any question that they are not comfortable answering during any interview.
- Each interview will be confidentially recorded through a UH officially licensed Microsoft Team account for the researcher's reference only in order to assure accuracy. No other party will have access to the interview while it is being recorded, nor will it be accessible to anyone other than the researcher after the interview. Each recording will be transcribed. Any specific documentation of interviews will be accessible only to the researcher in paper form and not released to any other party or entity.
- Any questions or clarifications about interview responses will be addressed with the participant through a member check interview.
- Member check interviews will be scheduled after the initial interviews are reviewed by the researcher. Participants will be contacted by email or phone to schedule the member check interview at the convenience of the participant after their contract hours are completed during a weekday or during a weekend at the participant's convenience, agreed upon by participant and researcher.
- A member check interview will follow the initial interview for the purpose of clarifying the researcher's understanding of the participant's responses. The member check interview is estimated to take between 20-45 minutes depending on the researcher's level of need to clarify information as well as the participant's responses.
- A final 60 minute panel discussion will follow all member check interviews and will include questions regarding participants' specific subject, preparing GT learners for the future, professional development in which they would like to participate, and extension questions related to topics participants bring to the conversation. Researcher clarifications will be made during the panel discussion to confirm the accuracy of researcher's understanding.

This research study includes the following component(s) where we plan to video/audio record you as the research subject:

- ☐ I agree to be audio and video recorded during the research study.
- ☐ I agree to be audio recorded only during the research study.
- ☐ I do not agree to be audio or video recorded during the research study. I understand that I will not be participating in this research study.

What happens if I do not want to be in this research?

You can choose not to take part in the research, and it will not be held against you. Choosing not to take part will involve no penalty or loss of benefit to which you are otherwise entitled.

Your alternative to taking part in this research study is not to take part.

What happens if I say yes, but I change my mind later?

You can leave the research at any time and it will not be held against you.

If you stop being in the research, already collected data that still includes your name or other personal information will be removed from the study record and it will be destroyed to maintain confidentiality.

Consent to Take Part in a Human Research Study

Is there any way being in this study could be bad for me?

We do not expect any risks related to the research activities. If you choose to take part and undergo a negative event you feel is related to the study, please contact Michelle Leigh Leverette.

Will I receive anything for being in this study?

Participants will receive a $5 Starbucks gift card.

Will being in this study help me in any way?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include personal validation from expressing your opinions in a receptive environment. Your perspectives will be analyzed and shared with educators and other stakeholders to provide insight into the professional opinions of GT educators. Therefore, contributing to this research study may aid in new understandings that lead to policy or procedural changes of educational systems to offer beneficial factors useful to the education of GT educators and/or learners. These benefits may directly and/or indirectly impact you depending on future outcomes of the study.

What happens to the information collected for the research?

Your taking part in this project is confidential and information you provide cannot be linked to your identity.

We may share and/or publish the results of this research. However, unless otherwise detailed in this document, we will keep your name and other identifying information confidential.

Can I be removed from the research without my OK?

The person in charge of the research study can remove you from the research study without your approval. A possible reason for removal includes no longer meeting one or more of the needed participant criteria:

- You are no longer a Gifted and Talented (GT) educator.
- You no longer teach middle school Gifted and Talented learning experiences.
- You are not current in your GT 30 initial hours and/or your 6-hour update.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, you should talk to the research team at 817-925-2888, 817-239-2702, michellelleverette@gmail.com or mllevere@central.uh.edu

This research has been reviewed and approved by the University of Houston Institutional Review Board (IRB). You may also talk to them at (713) 743-9204 or cphs@central.uh.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

Consent to Take Part in a Human Research Study

May we contact you regarding future research opportunities?

In the future, our research team may be interested in contacting you for other research studies we undertake, or to conduct a follow-up study to this one. There is never any obligation to take part in additional research. Do we have permission to contact you to provide additional information?

- ☐ Yes
- ☐ No

Consent to Take Part in a Human Research Study

Signature Block for Capable Adult

Your signature documents your consent to take part in this research.

Signature of subject	Date
Printed name of subject	
Signature of person obtaining consent	Date
Printed name of person obtaining consent	

Appendix B

Participants

Table 1- Participant Demographics

Participant Demographics

	Participant	Level Taught	Identified Gender	Ethnicity	Subject Taught	Years in Public Education	Years in Carbon ISD	Years of Experience Teaching GT Students	
1	Kristine	*middle school	female	Black	English	8	5	7	
2	Nadia	*middle school	female	Russian	Advanced Math	13	13	8	
3	Oscar	*middle school	male	Puerto Rican	History & Leadership	16	11	16	
4	Daisy	*middle school	female	White	History	17	17	12	
R	Michelle	*middle school	female	White	science	23	22	21	
						15.4	13.6	12.8	Average in years

* "middle school" includes 7th and 8th grade students in Carbon ISD

Appendix C

Questions

Figure 4-Survey Questions

Initial Survey-Participant Background Questions

Thank you for participating in this confidential research study.
The following questions are estimated to take 20-30 minutes.

Open Ended Questions

1. With regard to teaching in an online setting, how has COVID-19 impacted you as an educator?
2. … your implementation or delivery of content?
3. … your relationship with students?
4. … you as a co-worker/teammate/PLC member?

Likert Scale Questions

5. How prepared do you feel you are to educate learners in an online setting? (5 meaning "extremely prepared"; 1 meaning "not prepared at all")
6. If offered, how helpful are the professional developments your school district provides regarding online/virtual learners (5 meaning "extremely helpful"; 1 meaning "not helpful at all"; 0-not offered)
7. How prepared do you feel you are to educate GT learners (5 meaning "extremely prepared", 3 "somewhat prepared", 1 meaning "not prepared at all")
8. If offered, how helpful are the professional developments your school district provides regarding GT learners (5 meaning "extremely helpful"; 1 meaning "not helpful at all"; 0-not offered)
9. How prepared do you feel you are to educate learners from diverse backgrounds and cultures (5 meaning "extremely prepared"; 1 meaning "not prepared at all")
10. If offered, how helpful are the professional developments your school district provides regarding diverse learners (5 meaning "extremely helpful"; 1 meaning "not helpful at all"; 0-not offered)
11. How involved are GT learners' parents/guardians in their education (5 meaning "extremely involved", 3 "somewhat involved", 1 meaning "not involved")
12. How aware are GT learners of the category they were identified as GT (e.g. math, science, English, history, leadership, art, etc.? (5 meaning "extremely aware", 3 "somewhat aware", 1 meaning "not aware")
13. Including the current school year, how many total years have you taught GT learners in some type of advanced class?
14. What were the subjects of advanced classes you taught/facilitated?
15. How do you usually receive/fulfill your GT update hours?
16. Have you ever attended professional development to provide information about culturally relevant pedagogy (CRP) or culturally relevant teaching (CRT) provided by the district?
17. How many hours would you estimate you have spent attending professional development about online/virtual teaching?
18. How many total years have you been an educator in public school?
19. How many total years have you been an educator in this district?
20. How many total years have you been an educator in another type of educational setting?
21. How many total years have you been an educator in Texas?

Figure 5-Individual Interview Questions

Individual Interview Questions with Follow-Up Questions Embedded

1. Introduction of myself and the purpose of the interview: To gather authentic perspectives from GT educators in middle school during a unique time. Feel free to elaborate on any part of the question or questions you wish.
2. How or why did you start teaching GT classes?
3. At this time, how do you accommodate for any needs of GT students?
    - In the classroom?
    - Online?
4. What is the biggest issue that you think GT students face right now?
5. How do you believe GT students' process, think or retain information?
    - What are differences in how different GT students process, think or retain information?
6. What do you need to feel supported as a GT educator?
7. What are the most effective resources you implement for your GT learners?
    - Where do you get your resources?
    - How are these resources impacting your implementation of GT learning opportunities?
8. What resources/opportunities do you provide for GT students that you would not offer to general education students & why?
9. How has COVID-19 affected your implementation of GT learning experiences or opportunities?
    - How do you think COVID-19 will impact GT students this school year?
    - How do you think COVID-19 will impact GT students long-term?
    - How do you allow collaborative learning opportunities in light of COVID-19?
10. What type of culturally relevant teaching do you use when interacting with your GT students?
    - How are your culturally relevant teaching (CRT) strategies different for GT students as compared to general education students or are your strategies identical?
11. How do your CRT strategies affect GT students regarding academics? Creativity? Leadership?
12. How involved are the parents of your GT students?
    - How does this compare to the involvement of general education students?
13. Based on the survey responses, I would like to know how you create relationships with GT students under the current circumstances.
14. Is there any other information regarding GT students that you have observed during your experience that you would like to share?

Figure 6-Focus Group Discussion Questions

Focus Group Questions

1. Now that the school year is drawing to a close and we reflect back on this year, in what ways would you adjust your current advanced class support GT students even more effectively?

2. Thinking to future GT professional development sessions, what does your ideal professional development include?

3. How has your experience with COVID-19 protocols uniquely prepare GT learners for the future unknown careers?

4. How has your experience with COVID-19 protocols uniquely enhanced the soft skills of GT learners for the future unknown careers?
    a. soft skills examples (online communication with adults/authority figures, task completion, time management, organization etc.)

5. What do you wish parents of GT learners knew and how do you help parents understand that information?
    a. What is your best-case scenario of parent involvement?
    b. What do think the *tensions/difficulties* have you had in involving parents in GT education? Can you give an example of that…?

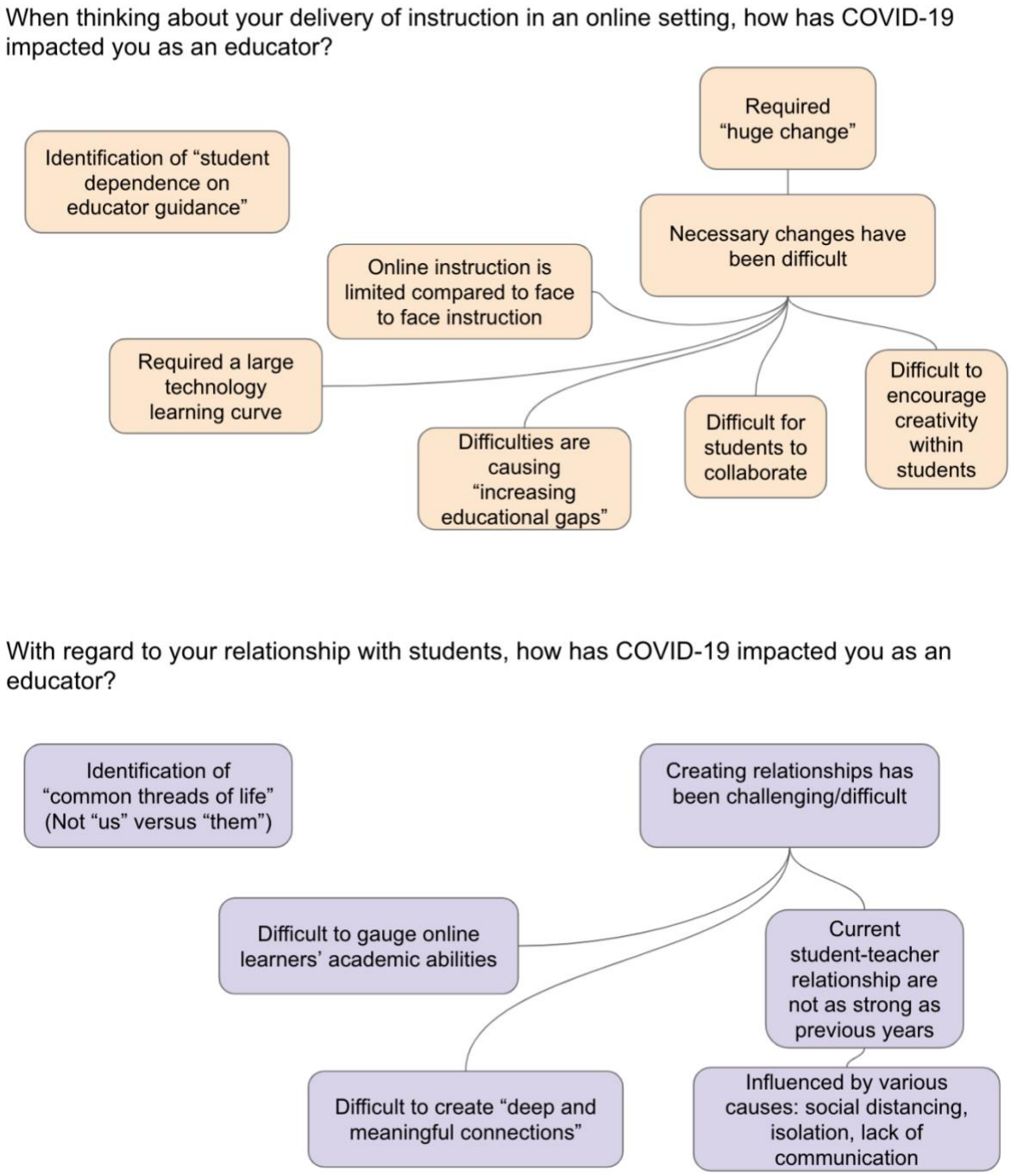
6. How your school, or the district support the parents of GT learners?
    a. What are suggestions you have for the campus and/or district to communicate with GT parents? What is the best-case scenario?

7. How important do you think that diversity of thought & diversity of experience is within the GT classroom?

Appendix D

Visual Representations

Figure 7-Emergent Themes from Survey



With regard to you as a co-worker/teammate/PLC member, how has COVID-19 impacted you?

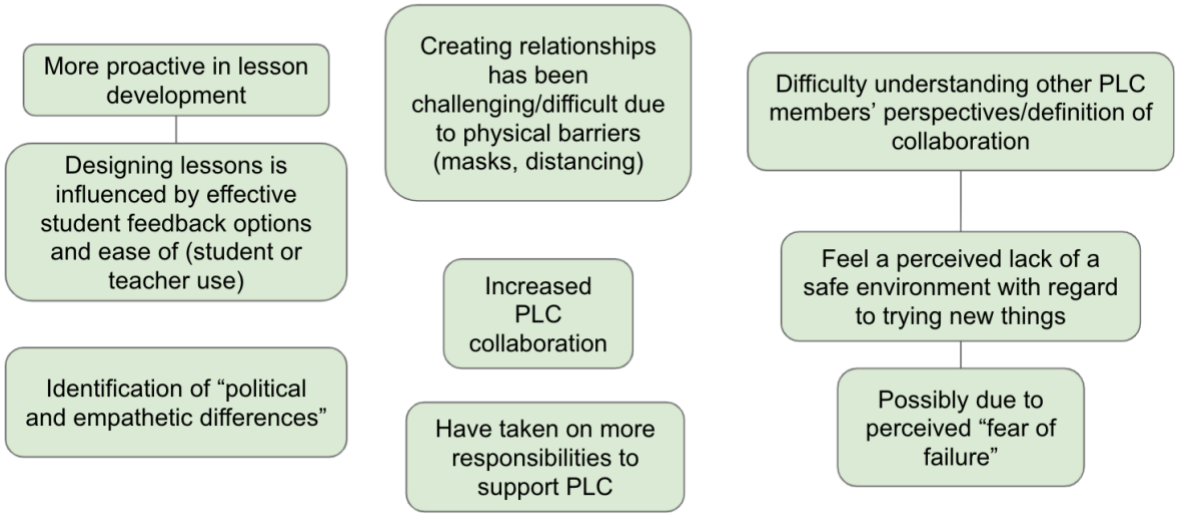
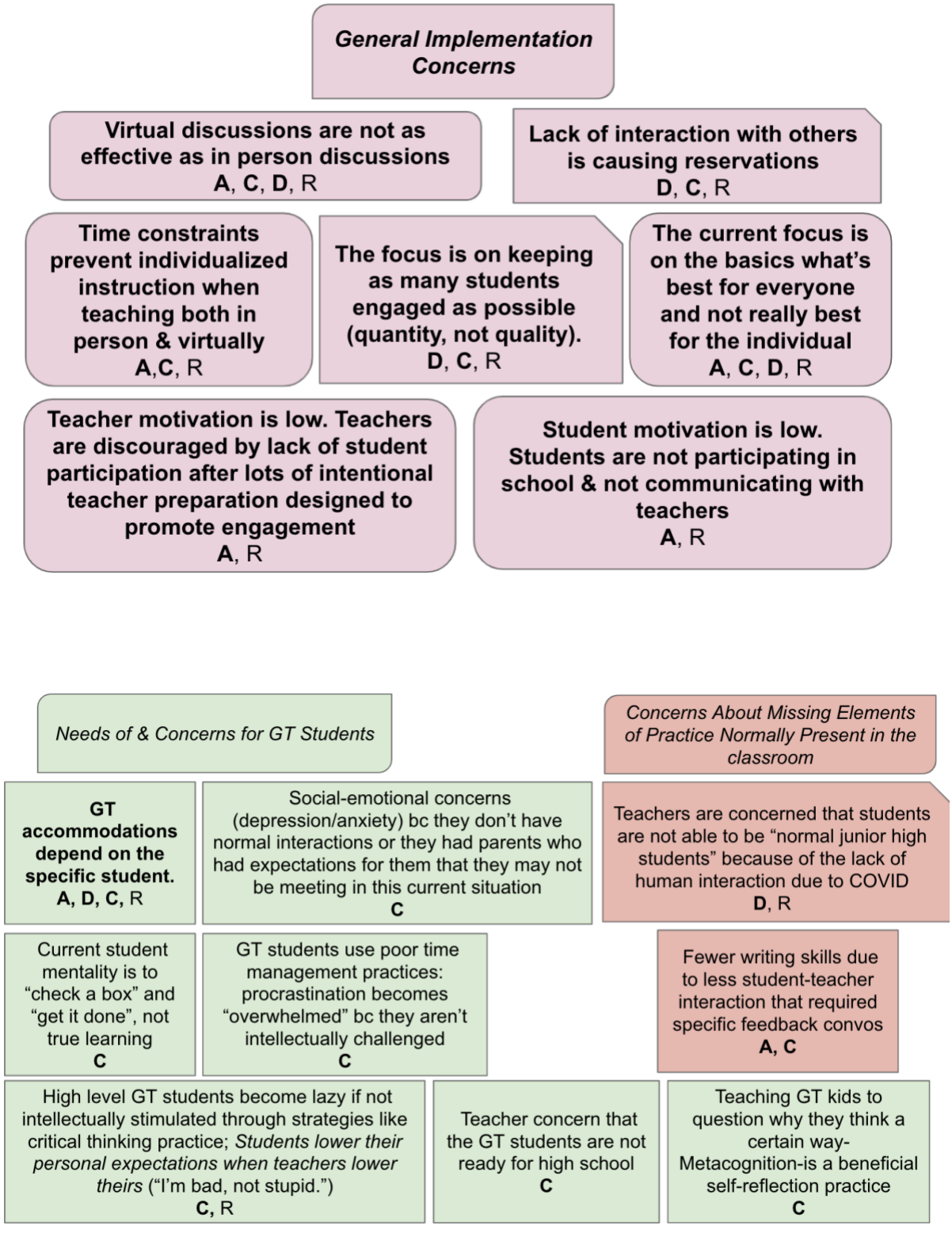
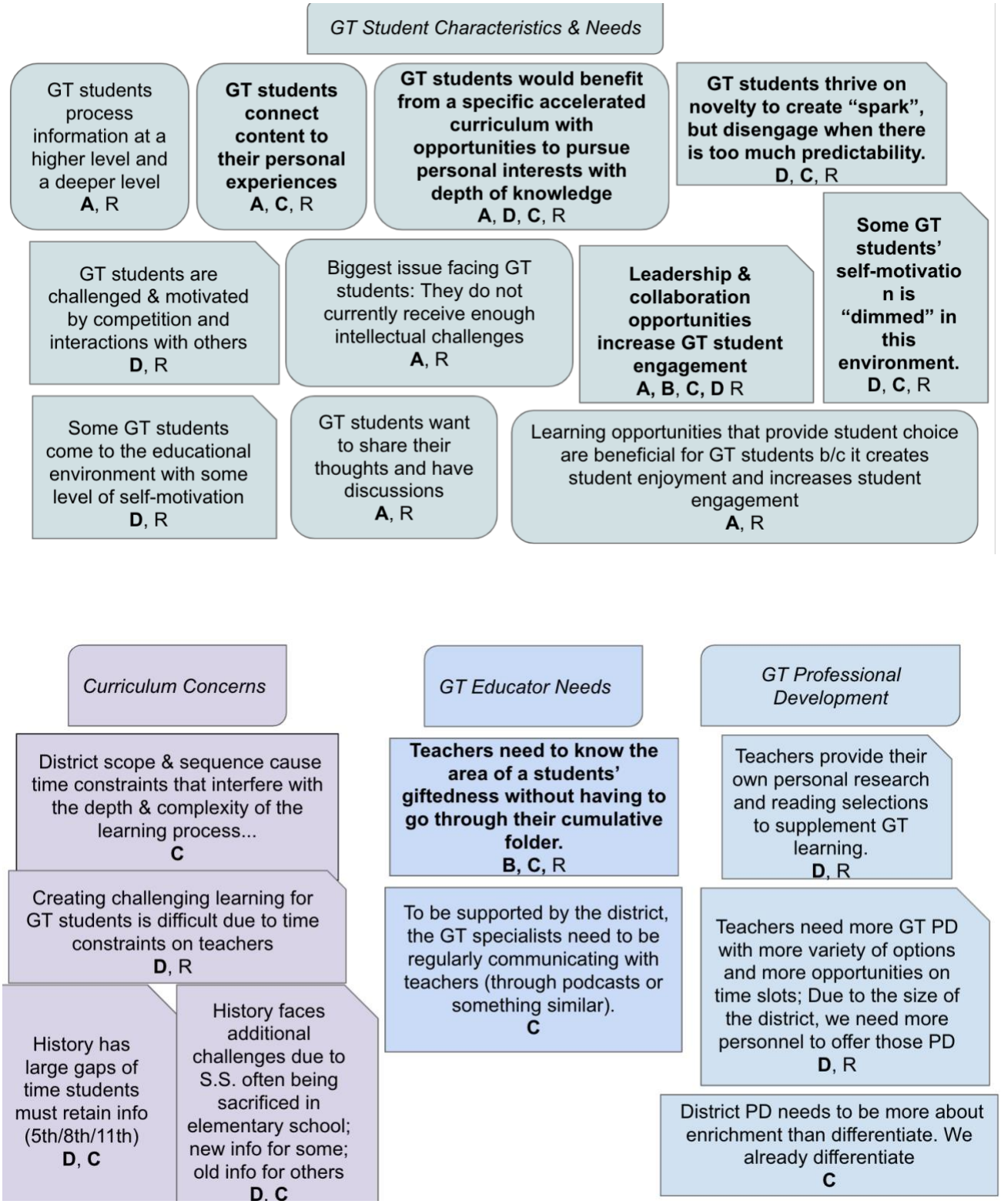
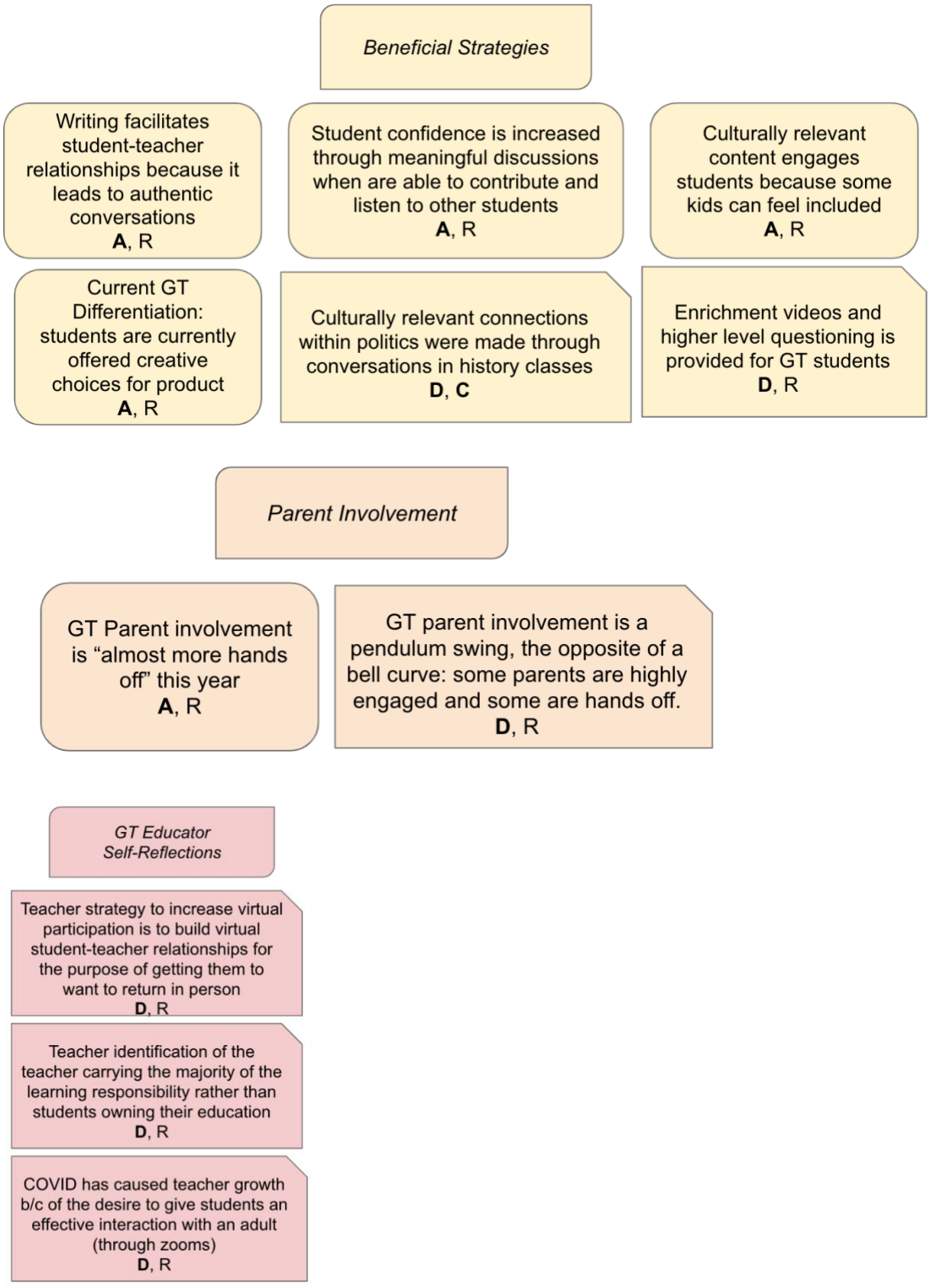


Figure 8- Emergent Themes from Individual Interviews

Participant "A"=Kristine, "B"=Nadia, "C"=Oscar, "D"=Daisy, and "R" for researcher




GT Student Characteristics & Needs
GT students process information at a higher level and a deeper level
A, R
GT students connect content to their personal experiences
A, C, R
GT students would benefit from a specific accelerated curriculum with opportunities to pursue personal interests with depth of knowledge
A, D, C, R
GT students thrive on novelty to create "spark", but disengage when there is too much predictability.
D, C, R
GT students are challenged & motivated by competition and interactions with others
D, R
Biggest issue facing GT students: They do not currently receive enough intellectual challenges
A, R
Leadership & collaboration opportunities increase GT student engagement
A, B, C, D R
Some GT students' self-motivation is "dimmed" in this environment.
D, C, R
Some GT students come to the educational environment with some level of self-motivation
D, R
GT students want to share their thoughts and have discussions
A, R
Learning opportunities that provide student choice are beneficial for GT students b/c it creates student enjoyment and increases student engagement
A, R
Curriculum Concerns
District scope & sequence cause time constraints that interfere with the depth & complexity of the learning process...
C
Creating challenging learning for GT students is difficult due to time constraints on teachers
D, R
History has large gaps of time students must retain info (5th/8th/11th)
D, C
History faces additional challenges due to S.S. often being sacrificed in elementary school; new info for some; old info for others
D, C
GT Educator Needs
Teachers need to know the area of a students' giftedness without having to go through their cumulative folder.
B, C, R
To be supported by the district, the GT specialists need to be regularly communicating with teachers (through podcasts or something similar).
C
GT Professional Development
Teachers provide their own personal research and reading selections to supplement GT learning.
D, R
Teachers need more GT PD with more variety of options and more opportunities on time slots; Due to the size of the district, we need more personnel to offer those PD
D, R
District PD needs to be more about enrichment than differentiate. We already differentiate
C


Beneficial Strategies
Writing facilitates student-teacher relationships because it leads to authentic conversations
A, R
Student confidence is increased through meaningful discussions when are able to contribute and listen to other students
A, R
Culturally relevant content engages students because some kids can feel included
A, R
Current GT Differentiation: students are currently offered creative choices for product
A, R
Culturally relevant connections within politics were made through conversations in history classes
D, C
Enrichment videos and higher level questioning is provided for GT students
D, R
Parent Involvement
GT Parent involvement is "almost more hands off" this year
A, R
GT parent involvement is a pendulum swing, the opposite of a bell curve: some parents are highly engaged and some are hands off.
D, R
GT Educator Self-Reflections
Teacher strategy to increase virtual participation is to build virtual student-teacher relationships for the purpose of getting them to want to return in person
D, R
Teacher identification of the teacher carrying the majority of the learning responsibility rather than students owning their education
D, R
COVID has caused teacher growth b/c of the desire to give students an effective interaction with an adult (through zooms)
D, R