# PERSEVERANCE OF GIFTED AND TALENTED GRADUATES FROM INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMMES: A TRANSCENDENTAL PHENOMENOLOGICAL STUDY

by

Jeannie Marie Steelreed

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education

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## APPROVED BY:

Dr. Chris Bellamy, Committee Chair

Dr. Vonda Beavers, Committee Member

Dr. Billie Jean Holubz, Committee Member

#### ABSTRACT

The purpose of this transcendental phenomenological study was to describe the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes. At this stage of the research, persevering factors are generally defined as characteristics such as academic rigor, family support, and community service, which lead to successful completion of the IBDP upon high school graduation (Atkas & Guven, 2015; Fitzgerald, 2015; Monreal, 2016; Ryan et al., 2014; Saavedra, 2016; Wright & Lee, 2014). Guiding this study was the social cognitive theory, by Albert Bandura, and the social development theory by Lev Vygotsky, as they relate the learning atmosphere to the knowledge acquisition of students (Bandura, 1971, 1986; Vygotsky, 1978). This study focused on four research questions: RQ1: How do participants, both educators and gifted and talented graduates, describe their experiences in International Baccalaureate Diploma Programmes?; RQ2: What characteristics of classroom practices do the participants identify as influential to their academic persistence in IBDP; RQ3: What challenges did participants face during their experience in the IBDP; RQ4: What factors do the participants, both educators and gifted and talented graduates, attribute to the perseverance to high school graduation? Data collection methods included participant interviews, writing prompts, and focus groups. Participants included five graduates of the IBDP and 5 teachers in an IBDP. Data analysis methods included open coding, establishing patterns, structural description and textural descriptions. Bracketing was conducted through journaling.

*Keywords*: gifted and talented, International Baccalaureate, gifted graduates, student engagement, gifted education

#### **Dedication**

"Trust in the Lord with all you heart and lean not on your own understanding; In all your ways acknowledge Him, and He shall direct your paths" (Proverbs 3:5-6, New King James Version).

With love and gratitude, I dedicate this dissertation to my family. To my wonderful husband, Jeff, whose love and support is never-ending, you truly are a gift of God. Your excitement for my success has charged me daily to walk in confidence and remember that I am a successful overcomer. To my children, Aaron, Caleb, Loreon and Linsey, my education has been a vivid aspect of your childhood. I am full of gratefulness and pride to see the outstanding men and women you have become amidst the hours I was studying and could not be with you throughout the years. To my mom, Frances Lloyd, your support and encouragement has helped me through some very dark and discouraging times. You have always been there reminding me to never give up, helping me in any capacity you knew how, especially when I would phone you stressed out and you always had a prayer and pep talk for me. To my dad, William Lloyd, thank you for your love, support and road trips to Virginia for intensive courses. Those road trip conversations are priceless, and I will always cherish them. Finally, to my sweet, beautiful granddaughter, Amelia Belle, your radiant smile lightens the heart of those around you. I began authoring this dissertation while we waited for you to choose your birthday. This has been a long journey, but I have walked this dissertation journey many days knowing that, "After all, tomorrow is another day" (Mitchell, 1936, p 1037).

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## **List of Abbreviations**

Advanced Placement (AP)

Diploma Programme (DP)

Gifted and Talented (GT)

Institutional Review Board (IRB)

Internal Assessment (IA)

International Baccalaureate (IB)

International Baccalaureate Diploma Program (IBDP)

Model United Nations (MUN)

Science Technology Engineering and Mathematics (STEM)

Zone of Proximal Development (ZPD)

#### **CHAPTER ONE: INTRODUCTION**

#### Overview

Educators began researching gifted and talented children during the early1900s (Jolly & Robins, 2016; Olszewski-Kubilius, Subotnik, & Worrell, 2015). Continuing research on gifted students remains inconsistent throughout the years, evident through the weakness of American education compared to other nations (Flint, 2014; Jolly, 2014; Kettler, 2016). The quantitative studies reveal patterns of giftedness (Altun & Yazici, 2014; Gubbels, Segers, & Verhoeven, 2014; Walker & VanderPloeg, 2015; VanTassel-Baska & Hubbard, 2016). While the personal experiences of gifted students are expressed through the qualitative studies, many of which focus on academic disengagement (Coleman, 2014c; Walker & VanderPloeg, 2015; Witte, Kiewra, Kasson, & Perry, 2015; Young & Balli, 2014).

Gifted students need a voice to share their experiences that encouraged them to graduate from the International Baccalaureate Diploma Programme. The IBDP is known for its reputation as a rigorous program for students (Atkas & Guven, 2015; Fitzgerald, 2015; Lia, Shum, & Zhang, 2014; Monreal, 2016; Saavedra, 2016; Wright & Lee, 2014). Many expert researchers in the field of gifted education express the need for further research of student engagement (DeNisco, 2015; Gubbins, Callahan, & Renzulli, 2014; Ritchotte, Rubenstein, & Murry, 2015). There is growing concern over contributing factors leading to high school dropout of gifted and talented students (Abeysekera, 2014; Blass, 2014; Cross & Coleman, 2014; Hannig & Koop, 2016; Jones, 2014; Preckel & Brunner, 2015; Scager, Akkerman, Pilot, & Wubbels, 2014). This study provides a voice to gifted and talented students, while focusing on determining factors that encouraged perseverance to graduate from the IBDP.

#### **Background**

Gifted students consist of the top intellectual and talented students in society. These top students are vital to our society because they are the future leaders (Brown & Garland, 2015; Cross & Coleman, 2014; Finn, 2014; Frantz & McClarty, 2016; Gallagher, 2015c; Muratori & Smith, 2015; Steenbergen-Hu & Olszewski-Kubilius, 2016; Young & Balli, 2014). Leadership skills are specifically stated in the defining of a GT student (Abeysekera, 2014; DeNisco,2015; Flint, 2014; Gallagher, 2015c; Yeung, 2014). When mentored and developed, a student with leadership qualities flourishes during their adulthood. These leadership qualities are nurtured through extracurricular activities such as clubs and sports (Jones, 2014; Lamb & Aldous, 2014; Stein et al., 2016). The educational success of GT students is not only imperative for them personally but for society (Brown & Garland, 2015; Finn, 2014; Flint, 2014; Frantz & McClarty, 2016; Gallagher, 2015c; Muratori & Smith, 2015).

#### Historical

Focus on GT students is inconsistent, beginning during the World War years (Flint, 2014; Gallagher, 2015c). With the world at war, America grew into a world power. To safeguard this worldwide position, the United States viewed GT students as a valuable national asset (Jolly & Robins, 2016; Olszewski-Kubilius, 2015). During the 1970s, giftedness was defined in the legislature with *The Marland Report*, which provided clarity when creating educational laws (Colangelo & Wood, 2015; Flint, 2014; Gallagher, 2015c; Jolly, 2014; Jolly & Robins, 2016; Pereira et al., 2015; Yeung, 2014). In 1988, the United States Legislature passed the Jacob Javits Gifted and Talented Students Education Act (Javits) specifically addressing the needs of gifted students (Abeysekera, 2014; Adelson & Kelcey, 2016; Coleman & Shah-Coltrane, 2015; Kettler, 2016; Pereira, Knotts & Roberts, 2015; Siegle et al., 2016; Tieso & Hutcheson, 2014;

VanTassel-Baska & Hubbard, 2016; Winniger, Adkins, Inman, & Roberts, 2014; Wu, 2017). To treat all students fairly, the United States created No Child Left Behind in 2002 and the Individuals with Disabilities Act in 2004 (Flint, 2014; Gallagher, 2015c; Gubbins et al., 2014; Johnsen et al., 2015; Kettler, 2016; Pereira et al., 2015; Roberts, Pereira, & Knotts, 2015; Ryser & Rambo-Hernandez, 2014; Tieso & Hutcheson, 2014). These pieces of legislation included GT students along with students with disabilities but was interpreted in the school systems as focusing on special needs students (Frantz & McClarty, 2016; Gallagher, 2015c; Kettler, 2016). Overwhelmingly, GT students were overlooked in these attempted educational reforms (Brown & Garland, 2015; Finn, 2014; Gallagher, 2015b).

The most recent change in education for GT students is the Every Student Succeeds Act (ESSA), approved by congress in 2015, which contains specific stipulations for gifted education called the Talent Act (U.S. Department of Education, 2015). The aspects of this law focus on academic rigor and instructional resources in the classroom and through professional development. Substantiated by resources, the ESSA requires an increase in rigor in all classes. These requirements include higher standards which will aid in the engagement of GT students. In response to this legislative change, schools are looking to magnet programs to help make some reforms (Adelson & Kelcey, 2016; Moon, 2016).

Around the world, educators look for more effective ways to educate students, meeting students' needs and creating high international academic standards. IB schools originated in Geneva, Switzerland during the late 1960s primarily to educate children of diplomatic parents who worked for the United Nations and were experiencing regular transitions (Corlu, 2014; Fitzgerald, 2015; Monreal, 2016; Ryan et al., 2014). The idea of the IB Programme was to bring academic stability for transient students, preventing the sacrifice of a student's education due to

their parent's diplomatic career (Ryan et al., 2014). IB schools emerged strongly and grew quickly resulting in currently having over 5,000 schools (Monreal, 2016).

The goal for IB schools was to create a world-class curriculum ensuring academic success for students around the world (Atkas & Guven, 2015; Fitzgerald, 2015; Monreal, 2016). This programme ensures consistent academic standards internationally for students relocating during their K-12 years (Jamal, 2016; Lia et al., 2014; Monreal, 2016). Understanding the differences throughout the developmental years, the IB curriculum is separated into three levels.

The first two levels of the IB programme span across the elementary and middle school ages. The Primary Years Programme (PYP) consists of grades K3-5, while the Middle Years Programme (MYP) consists of grades 6-10 (Atkas & Guven, 2015; Bunell, 2015; Fitzgerald, 2015; Jamal, 2016; Lia et al., 2014; Monreal, 2016; Ryan et al., 2014; Savage & Drake, 2016). These two levels coordinate instructional strategies and academic responsibilities with cognitive and developmental abilities at the designated age of the student (Monreal, 2016; Savage & Drake, 2016). Once the MYP is complete, the students have the option to apply for the Diploma Programme (Saavedra, 2016).

For secondary students, the IB Diploma Programme (IBDP) is available during grades 11 and 12 (Monreal, 2016; Saavedra, 2016). The IBDP is a rigorous academic high school program focused on critical thinking skills and community service (Atkas & Guven, 2015; Fitzgerald, 2015; Lia et al., 2014; Monreal, 2016; Saavedra, 2016; Wright & Lee, 2014). The expectations of the students enrolled in an IBDP are higher academically, socially and behaviorally resulting in careful consideration for admittance into the programme (Saavedra, 2016; Wright & Lee, 2014). Many students complete the MYP and choose not to continue through the DP, not

considering the substantial benefits the program provides. The IB provides these students with a Career Program option (Jamal, 2016; Lia et al., 2014; Monreal, 2016).

The expectations of the IBDP exceed the average school system standards and therefore are taken into consideration by colleges and universities for admittance (Saavedra, 2016; Wright & Lee, 2014). The DP mixes academic, social, and community service requirements for diploma completion with extensive focus on communication through writing (Fitzgerald, 2015; Lia et al., 2014: Monreal, 2016; Saavedra, 2016; Wright & Lee, 2014). Colleges and universities around the world recognize DP graduates through significant admittance considerations as well as scholarship opportunities (Atkas & Guven, 2015; Fitzgerald, 2015; Monreal, 2016; Wright & Lee, 2014). The completion of an IBDP with its level of rigor and standards provides a solid foundation for college education (Saavedra et al., 2016, Kettler & Hurst, 2017).

#### **Social Context**

The GT students sitting in the classrooms today are the leaders of tomorrow's society (Finn, 2014; Muratori & Smith, 2015; Steenbergen-Hu & Olszewski-Kubilius, 2016). These intellectual students far exceed their peers in academics, requiring differentiation in the classroom (Bennett, 2014; Finn, 2014; Flint, 2014; Horak & Galluzzo, 2017; Kahveci & Atalay, 2015; Kettler, Rusell, & Puryear, 2015; Laine, Kuusisto, & Tirri, 2016; McLaughlin, 2014; Siegle, 2014; Siegle, 2015a; Siegle et al., 2016; Sulak, 2014; Swan, Coulombe-Quach, Huang, Godek, Becker, & Zhou, 2015; Van Tassel-Baksa 2015a; VanTassel-Baska & Hubbard, 2016; Walker & Shore, 2015; Walker & VanderPloeg, 2015; Wu, 2017). Often the needs of GT students are overlooked (Blaas, 2014; Gallagher, 2015c; Steenbergen-Hu & Olszewsju-Kublius, 2016; Warne & Price, 2016). A common theme in the research reveals the underachievement of GT students is the result of a disengaged learning environment, where GT students are not

academically challenged (Cross & Coleman, 2014; DeNisco, 2015; Fung, Yuen & Yuen, 2014; Hannig & Koop, 2016; Preckel & Brunner, 2015; Ritchotte et al., 2015; Scager et al., 2014; Simpson, 2014; Wu, Pease, & Maker, 2015; Young & Balli, 2014). This brings educators to a place of asking how the needs of GT students can be met (Karsenty, 2014; Kettler, 2016; Ryser & Rambo-Hernandez, 2014; Warne & Price, 2016).

To meet the needs of GT students, schools reorganize curriculum and bring new educational programs into their school systems (Beasley, Briggs, & Pennington, 2017; Frantz & McClarty, 2016; Gagnon & Mattingly, 2016; Horak & Galluzzo, 2017; Imburgia, 2014; Klavir & Goldenberg, 2014; Lamb & Aldous, 2014; Siegle et al., 2016; Swan et al., 2015; VanTassel-Baska & Hubbard, 2016; Wu, 2017; Wu et al., 2015). Many parents choose magnet program options to ensure rigorous academia for their gifted child (Rollins & Cross, 2014; Moon, 2016; Stein, Ostrander, & Lee, 2016). The International Baccalaureate (IB) programme is an answer for some parents of GT children (Dedrick et al., 2015; Kettler & Hurst, 2017; Siegle et al., 2016). This program consists of critical thinking instructional strategies along with an international worldview (Atkas & Guven, 2015; Fitzgerald, 2015; Lia et al., 2014; Monreal, 2016; Ryan, Heineke, & Steindam, 2014). The academic rigor of the IB provides the IB with its reputation throughout the world (Monreal, 2016; Ryan et al, 2014; Saavedra, 2016; Saaveedra, Lavore, & Flores-Ivich, 2016; Wright & Lee, 2014).

## **Theoretical Concepts**

Guiding theories of GT students are the social cognitive theory by Albert Bandura, and the social development theory by Lev Vygotsky. These two theories focus on the influence of the learning atmosphere and its influence on how students learn (Bandura, 1971, 1977, 1983; Vygotsky, 1978). GT students, like other students, necessitate motivation in the classroom

(Finn, 2014; Siegle, 2015a; Siegle, McCoach, & Shea, 2014; VanTassel-Baska, 2015a; Vuyk, Kerr, & Krieshok, 2016). GT students thrive in environments with encouragement and nurturing from teachers (Gallagher, 2015d; Gallagher, Courtright, & Robinson, 2015; Hébert, Corcoran, Coté, Ene, Laine, Kuusisto, & Tirri, 2016; Leighton, Holmes, & Padula, 2014; Siegle et al., 2016; Wu, 2017). Often educators consider GT students able to be self-responsible in their learning (Blaas, 2014; Jung, Young, & Gross, 2015; Overzier & Nauta, 2014; Wu et al., 2015). With this perspective, teachers may not cultivate or challenge the top ten percent in the school (Brown & Garland, 2015; DeNisco, 2015). In 1991, Gardner stated,

If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might have viewed it as an act of war... We have, in effect, been committing an act of unthinking unilateral educational disarmament (p.1).

Mediocracy is the enemy of the American education system (Finn, 2014). Unfortunately, the education system still does not always meet the needs of GT students (Abeysekera, 2014; Flint, 2014; Gallagher, 2015c; Kettler, 2016; Klavir & Goldenburg, 2014). The high standards of the IBDP, along with the focus on collaboration, encourages academic engagement of gifted learners. With the use of learner profiles, reflective assessments, critical thinking requirements, and accelerated rigor, the IBDP appears to be a great fit for GT students (Fitzgerald, 2015; Lia et al., 2014). According to the social learning theory, Vygotsky explains how students, when not feeling supported by their peers or teacher, make the choice to work alone (Coleman, 2014e; Fung et al., 2014; Kanevsky, 2015; Overzier & Nauta, 2014; Thacker, 2017; Walker & Shore, 2015). Many times, GT students do want to work in groups because they feel the work is not be equally completed by the group members or the other group members do not work according to

the GT students' standards (Coleman, 2014d; Gentry, 2016; Walker & Shore, 2015). By enrolling in the IB programme, the students acclimate to collaborating in and out of the classroom (Finn, 2014; Saavedra, 2016). The importance of GT students sharing their experiences is vital (Hébert et al., 2014; Young & Balli, 2014). The more educators know about what works to motivate GT students, the better professional development is implemented to ensure these factors remain present (Hannig & Koop, 2016; Wu et al., 2015).

#### Situation to Self

As a professional teacher and a novice researcher, Bandura's social learning theory, expanded by Lev Vygotsky, is integrated throughout my daily life (Bandura, 1977; Vygotsky, 1978). I conducted this study through the scope of social development, researching, and analyzing the data. Through the lens of constructivism, I studied how the learning atmosphere is created to enhance the learning of GT students. Epistemological assumptions are brought to the research and constructivism guided this study (Creswell, 2013; Gall, Gall & Borg, 2007). Researchers understand and analyze data through personal worldviews. Through my personal worldview, my passion for the education of GT students is ignited.

My understanding of the world of gifted students comes from my experience as a mother of a gifted student now attending college. My son faced the struggles that researchers have studied. Although he graduated valedictorian of his high school with academic scholarships, he was not successful during his first year of college. He dropped out and returned a few years later. Watching him disengage from the classroom at the end his senior year and into his college freshman year was difficult.

Over the years in my career as a high school teacher, I have had the privilege of teaching many gifted and talented students. Some are zealous in their education, overachieving in all

areas, while others appear to back off and disengage from the classroom. I taught one gifted student who was a senior in high school and was offered an academic scholarship to Massachusetts Institute of Technology (MIT). However, during the course of his senior year he disengaged from several of his classes, his grades dropped, and he lost the scholarship opportunity at MIT. To these situations, there must be academic programs to increase the engagement of GT students aiding in academic success.

#### **Problem Statement**

The problem is that the individual high school success stories of gifted and talented students graduating from the IBDP have been largely ignored. A negative classroom atmosphere created by teachers' perceptions and/or students' peer pressure may contribute to academic underachievement in GT students (Cross et al., 2016). GT students may experience social emotional effects of being gifted, which occurs through peer pressure from being different from the majority (Coleman & Cross, 2014). Some GT students respond to this type of pressure by deliberately underperforming academically to be socially accepted (Coleman & Cross, 2014). Underachievement in students is a warning signal for educational intervention to prevent possible under employment as adults. A program that focuses on educating the whole child, regardless of academic skill level is The International Baccalaureate Diploma Programme (Wright & Lee, 2014). IBDP classes have revealed to be supportive of gifted education (Siegle et al., 2016). In attempt to prevent under employment, one of the goals of the IBDP is to prepare students for college entrance and adulthood (Ryan et al., 2014).

Little research exists in giving a voice to GT graduates of the IBDP expressing factors that supported their high school success in graduation. This phenomenological study examined GT graduates and teachers of the IBDP in states located in the Southeast United States. In

addition, I collected and analyzed data from five GT graduates and five DP teachers to address a gap in the literature to reveal success factors of the IBDP leading to high school graduation for the GT student participants.

## **Purpose Statement**

The purpose of this transcendental phenomenological study was to describe the factors that supported the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes in Southeast United States. At this stage of the research, persevering factors are generally defined as characteristics such as academic rigor, family support, and community service, which lead to successful completion of the IBDP upon high school graduation (Atkas & Guven, 2015; Fitzgerald, 2015; Monreal, 2016; Ryan et al., 2014; Saavedra, 2016; Wright & Lee, 2014). The theories guiding this study were the social cognitive theory, by Albert Bandura, and the social development theory by Lev Vygotsky, as they relate to the learning atmosphere to the knowledge acquisition of students (Bandura, 1971; Cheung, et al., 2015; Kanevsky, 2015; Sulak, 2014; Thacker, 2017; Vygotsky, 1978; Wass & Golding, 2014; Wu, 2017).

## **Significance of the Study**

Recent research on gifted education is limited in the area of IBDP and the factors that encouraged student engagement (Altun & Yazici, 2014; Coleman, 2014c; Gubbels et al., 2014; Siegle et al., 2016; Young & Balli, 2014). The review of literature serving as a foundation for this research is comprised of a mixture of both qualitative and quantitative studies. The qualitative studies focus on the experiences of GT students, with many explaining disengagement and searching for contributing factors for this phenomenon (Coleman, 2014c; Walker & VanderPleog, 2015; Witte et al., 2015; Young & Balli, 2014). The quantitative studies

compare variables which may affect student achievement (Altun & Yazici, 2014; Gubbels et al., 2014; Walker & VanderPloeg, 2015, VanTassel-Baska & Hubbard, 2016).

In regard to IB schools, qualitative researchers have explored the critical thinking skills integrated within the curriculum, and quantitative researchers analyzed the academic achievement of GT students in this learning atmosphere (Dedrick, et al., 2015). In my study, I expanded upon the current research, qualitatively investigating the factors that influenced GT students to graduation from the IBDP from the students' perspective, providing empirical significance.

The theories that guided this research may substantiate the importance of the learning atmosphere and instructional strategies that are implemented in the classroom with gifted and talented students. The social cognitive theory, by Albert Bandura, and the social development by Lev Vygotsky, explain the reasoning for gifted and talented students to preferring working alone rather than in groups (Kanevsky, 2015; Thacker, 2017; Walker & Shore, 2015; Wass et al., 2014). Through high self-efficacy, teachers differentiate lesson plans to create active, engaging classrooms for all students (Siegle et al., 2014).

Through this research, factors that instigate engaging GT students through graduation are revealed. School district leaders may benefit from the results of this study in regard to the GATE programs within their schools. The findings of this research may aid teachers' professional development in relation to GATE programs. Research in the education of teachers working with GT students is recommended by previous researchers (Coleman, 2014c; Fraser-Seeto, & Wookcock, 2014; Roberts et al., 2015). Scholarly literature reveals the need for changing the learning atmosphere of GT students (Abeysekera, 2014; Baudson & Ziemes, 2016; Beasley et al., 2017; Coleman, 2014a; Coleman, 2014d; Cross et al., 2015; Finn, 2014; Gallagher, 2015a;

Gallagher, 2015c; Gentry, 2016; Horak & Galluzzo, 2017; Kahveci, 2015; Kahveci & Atalay, 2015; Klavir & Goldenberg, 2014; Laine et al., 2016). Researching the characteristics of the IBDP and its learning atmosphere for GT students may reveal key aspects for their perseverance through the program and college acceptance (Atkas & Guven, 2015; Fitzgeral, 2015; Monreal, 2016).

#### **Research Questions**

The most effective way to study this phenomenon was to allow the participants to have a voice. As the researcher, I sought to listen to the participants and inquire about their experiences in depth, providing an opportunity for their voice to be heard, which could open greater opportunities for GT students (Moustakas, 1994). To fulfill this task, the following research questions guided the study:

**RQ1:** How do educators and gifted and talented graduates describe their experiences in International Baccalaureate Diploma Programmes?

This question provided the opportunity for each participant to have a voice explaining their experiences in alignment with the driving inquiry of this research. The importance of giving a voice to GT students is an ever-increasing need for academic achievement (Coleman, Micko, & Cross, 2015; Olthouse, Edmunds, & Sauder, 2014). Studies show how GT students in mainstream classrooms may not be given the opportunities to exhibit their full potential (Siegle, 2015a; Young & Balli, 2014). However, successful teachers of GT students create an engaging classroom which enhances the academic achievement of their students (Siegle et al., 2014).

**RQ2:** What characteristics of classroom practices do the educators and gifted and talented graduates identify as influential to the graduates' academic persistence in International Baccalaureate Diploma programs?

Research on GATE will often refer to instructional strategies implemented in the classroom. These researchers attempt to highlight what works with engaging GT students in the classroom. Responses from the participants of this study built upon the research in this area aiding the researcher to connect instructional strategies along with other factors of a positive classroom environment to academic success (Coleman, 2014c; Coleman, 2014b; Mammadov & Topçu, 2014; Peters & Matthews, 2016; Wu, 2017; Wu et al., 2015).

**RQ3:** What challenges did educators and gifted and talented graduates face during their experience in the International Baccalaureate Diploma Programme?

Much can be learned through listening to obstacles others have had to overcome. Delving into their experience provided in-depth insight into the factors that helped overcome their situation. This question helped guide the research through investigating the perseverance of the participants through their individual perspectives (Young & Balli, 2014).

**RQ4:** What factors do the educators and gifted and talented graduates attribute to the perseverance to high school graduation?

There are various factors to encourage a high school student to be successful in reaching high school graduation. Often these factors can be outside of the classroom (Blass, 2014). This question guided the participants into introspection to provide the many different aspects of their personal situation which may, in turn, enhance the research.

To identify common persisting factors among participants in the IBDP, the responses of each participant were analyzed for similarities and differences. Previous research reveals a more positive psychological well-being of GT students in rigorous programs (Blaas, 2014; Coleman, 2014d). Taking this into consideration, the comparison of the participants'

responses provided insightful information and brought a balance to the research data of this study.

#### **Definitions**

The following definitions include key terms and are provided for understanding:

- 1. *Gifted and Talented Education* Educational programs implementing instructional strategies specifically for engaging and challenging students identified as gifted and talented (Coleman, 2014d; Coleman & Shah-Coltrane, 2015).
- 2. *Gifted and Talented Students* Students with exceptional abilities causing them to excel above their peers. The exceptionalities of these students may be gained environmentally and genetically (VanTassel-Baska, 2015b).
- 3. *International Baccalaureate* School programs focused on international studies found around the world. The programmes center around critical thinking skills and community service, challenging the students in international studies (Atkas & Guven, 2015; Fitzgeral, 2015; Lia et al., 2014; Monreal, 2016).
- 4. *International Baccalaureate Diploma Programme* Accelerated high school program with the global curriculum designed for high-achieving students. These high school programs incorporate learning styles, critical thinking skills, community service projects, international studies and fine arts (Atkas & Guven, 2015; Dedrick et al., 2015; Fitzgerald, 2015; Lia, et al., 2014; Monreal, 2016).
- 5. Zone of Proximal Development A key factor in the social learning theory, as expanded by Lev Vygotsky, focusing on the individual's learning potential explaining the ability of students to grow in learning from one stage to another, building knowledge upon former knowledge (Vygotsky, 1978; Wass & Golding, 2014).

### **Summary**

The goal of this study was to take an in-depth look into the lives of IBDP graduates to discover what factors encouraged their academic success. The problem is determining factors that supported the perseverance of gifted and talented students who graduated from International Baccalaureate Diploma Programmes. Prior research on GT students has fell short of identifying success factors because they only measure achievement and engagement primarily. Another shortfall of previous research was that the focus was limited to the amount of GT high school dropouts. The problem with prior research is it never addresses the gap of identifying success factors for GT continuous engagement. Addressing the factors and elements of success in the IBDP directly fills gaps not previously studied. This research sought to unveil some of the persevering factors of IBDP graduates which they considered contributed to their success.

Through several data collection methods including interviews, writing prompts, and focus groups, the participants shared their experiences. In this study, I analyzed and compared these shared experiences, looking for common factors contributing to success. The results of the study may provide information to the GATE program administrators in planning teacher education programs around the world.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### Overview

Overall, teachers create the atmosphere in their classrooms (Hébert et al., 2014). Despite best intentions, the individual perceptions of these teachers may negatively influence the classroom atmosphere in relation to GT students (Gentry, 2016). The purpose of my study was to describe the factors that supported the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes. This literature review investigates recent research and literature studying perceptions and achievement factors of gifted students along with an overview of the IBDP. The main concept of this chapter is to present a comprehensive review of literature on perceptions and achievement of GT students and the theoretical framework that is influential in creating those perceptions about and in GT students. This chapter also explains the social-emotional effects of being gifted and reveals a gap in literature that phenomenologically studies the success factors of the IBDP for GT students and teachers in the IBDP.

#### Theoretical Framework

A solid theoretical framework is necessary to build and guide a study. Two theories serve as a foundation for this study: The Social Cognitive Theory by Albert Bandura and the Social Development Theory by Lev Vygotsky. In this research these theories are demonstrated in the education of gifted and talented students.

#### The Social Cognitive Theory

The Social Cognitive Theory devised by Albert Bandura guides this research (Bandura, 1986). Bandura (1971), explained how children learn behaviors, which he called reinforcers, through the interaction and observation they experience in their environment. Bandura published

his initial findings in the book *The Social Learning Theory* in 1971, explaining his research on how children learn through observing. Bandura (1971) stated, "In the social learning system, new patterns of behavior can be acquired through direct experience or by observing the behavior of others" (p. 3). Through the lens of the social learning theory, Menzies, Lane, Oakes, & Ennis (2017) indicated that an engaging and energy-filled classroom inspires students to stay engaged in the learning process; in their enthusiastic involvement, the students will share what they have learned with others. With environmental reinforcers, patterns of behavior can be demonstrated through collaboration in the classroom, which sparks learning among peers (Özerk & Özerk, 2015; Thacker, 2017). This energizing atmosphere is considered an engaging learning atmosphere and is influential upon students' academic growth (Korobova & Starobin, 2015).

These reinforcers thus mold an individual's self-efficacy, which returns to the foundation of Bandura's Social Cognitive Theory (Bandura, 1986). In the Social Cognitive Theory, Bandura described the idea of self-efficacy, acquired during experiences and social situations, as how a person understands the information he/she receive through these situations (Bandura, 1986). The Social Cognitive Theory is interwoven with Bandura's Social Learning Theory integrative concept of reinforcements, which are internal or external factors that cause a person to respond in a behavior with the formation of self-efficacy beliefs (Bandura, 1977, 1986). These ideas of individual self-efficacy and environmental reinforcers in learning guide my research of GT students and how the classroom atmosphere, along with the perception of others toward them, influence their learning atmosphere.

A person's self-efficacy shapes the personal worldview through self-perceived beliefs (Bandura, 1986). Bandura (1986) explained that these beliefs are what help or hinder the person when confronted with obstacles and difficult situations. The person may or may not respond

with higher-level, critical thinking skills thus bringing success or failure through these difficulties (Bandura, 1986). Thus, a student's self-efficacy will affect his/her learning in the classroom and a teacher's self-efficacy will influence his/her creation of the learning atmosphere in the classroom (Bandura, 1993).

There are two types of self-efficacy explained as high self-efficacy and low self-efficacy. Hence, a person with high self-efficacy are prone to higher-level, analytical thinking when confronted with difficult situations and a person with low self-efficacy will tend to avoid obstacles and set low or few goals (Bandura, 1993). The research of Bandura revealed that people with high self-efficacy are determined individuals who set high goals and do not withdraw from difficult situations. These are the risk-takers in society, who believe there is always a way to overcome any situation (Bandura, 1993). According to Bandura, 1993, the difference in attaining a high or low self-efficacy is a person's perceived self-efficacy.

Bandura (1993) furthered that the self-efficacy of a teacher influences the atmosphere in the classroom and, ultimately the self-efficacy of the students. Hence, when interacting with students, a teacher might display a low self-efficacy toward differentiating for those students, based upon perceived ideas, not helping those students to reach their academic potential. However, a teacher with high self-efficacy would be more positive toward all students and effectively differentiate lesson plans for the students' needs, which would create an engaging classroom (Bandura, 1993). The teachers are the motivators in the classroom and according to Siegle, et al. (2014), the teacher's high-level self-efficacy in teaching GT students, sets the stage for a supportive and engaging classroom atmosphere.

#### The Social Development Theory

Lev Vygotsky built upon Bandura's work of social learning, calling his theory the social

development theory (Vygotsky, 1978). Vygotsky focused on the building of knowledge upon prior knowledge through social situations (Vygotsky, 1978). The social learning theory is another foundational theory for this research because of Vygotsky's belief that the students' cognition is in direct relationship to the social interaction with their surroundings (Vygotsky, 1978). Through the years, educators have studied the social atmosphere of a learning environment and its effect on the learning process of students (Cheung, et al., 2015; Walker & Shore, 2015). They discovered learning is a process occurring over time and the learning atmosphere influences that process (Knafo, 2016; Moore, Westwater-Wood, & Kerry, 2016; Thacker, 2017; Wu et al., 2015). When students work with their peers, they build upon each other's knowledge exemplifying Vygotsky's social development theory (Knafo, 2016; Moore et al., 2016).

In the eyes of Coleman (2014e), Vygotsky's zone of proximal development (ZPD) built upon Bandura's theory of social learning becoming a key factor, focusing on the individual's learning potential. The ZPD explains the ability of students to grow in learning from one stage to another, building knowledge upon former knowledge (Kanevsky, 2015; Moore et al., 2016). A student's ZPD increases when interacting with someone that is more knowledgeable in the content matter, creating a challenging academic atmosphere (Coleman, 2014e; Wass & Golding, 2014). Enhancing a student's ZPD energizes the classroom atmosphere inspiring the students to desire to know more (Moore et al., 2016; Siegle et al., 2016; Vogelaar & Resing, 2016).

To determine a student's ZPD, educators observe the student's interaction with others. For Vygotsky, the interactions between students were an important aspect in the development of their cognitive abilities such as thinking, learning and communicating with others (Coleman, 2014e). Teachers incorporating classroom activities that stimulate these cognitive abilities

enhance each student's ZPD, creating a learning atmosphere of higher-level learning (Vogelaar & Resing, 2016). For example, a lesson utilizing active reading, peer discourse, group discussion and communication through writing or presentations, engages each one of Vygotsky's aspects, broadening the ZPD of each student (Moore et al., 2016; Siegle et al., 2016). Higher-level learning like this not only engages the students but challenges them to strive to excel (Coleman, 2014e; Siegle et al., 2016; Wu et al., 2015).

When teaching GT students, these students respond to active, higher-level learning activities (Coleman, 2014e). According to Coleman (2014e), these students need higher-level and creative thinking activities which are, by design, appropriate to challenge GT students, building upon their ZPD. These higher-level thinking activities require differentiation on the part of the teacher (Siegle et al., 2016; Spanke & Paul, 2015).

Through the lens of the social cognitive and social development theories, this research reveals how the two are closely related and effectively align with the education of GT students. Sometimes GT students will rise to the occasion when faced with a difficult assignment exemplifying high self-efficacy, while other GT students with low self-efficacy will disengage in the classroom and underperform (Siegle et al., 2014). Engaging lessons, incorporating the various aspects of the social cognitive and social development theories, produce an effective learning environment for GT students (Beasley et al., 2017; Gallagher et al., 2015).

#### **Related Literature**

Now that the theoretical foundation has been laid for this research, I will share a review of research and literature in the area of GT students. The most common theme in the literature is the underachievement of gifted students but brought attention to the gap in literature concerning factors that encourage academic success for GT students who graduated from the IBDP. I also

researched teachers of gifted students, their classroom atmosphere, and the instructional strategies they implement in their classrooms.

## **History of Gate**

The first aspect of GATE literature is the history of how the idea of gifted education began and has changed throughout the years. The focus on gifted students began during World War I. Lewis Terman defined giftedness based upon a high IQ score in 1925 (Terman, 1925). In America, the education of gifted students was initiated by federal legislature as early as 1931 (Jolly & Robins, 2016). During this time of war and economic despair, America was looking for future leaders. Technological advancements were moving at a fast pace and if America desired to remain a world power, they needed to seek out the gifted and talented in math and science, to press forward in new technologies and continue to modernize. However, the distraction of war caused the government to remain quiet on the matter (Jolly & Robins, 2016).

From those early beginnings, not much attention was given to gifted education until after WWII. It was then that President Truman led the American people in a new role of world leadership (Jolly & Robins, 2016). America had taken on the role of the strong, protective, big brother of the world. In preserving this position, American leadership knew continued progress in science and math was necessary to expand technology (Jolly & Robins, 2016).

At this point, Harry Truman established the National Science Foundation (NSF). He made the following statement upon signing it into law:

The establishment of the National Science Foundation [NSF] is a major landmark in the history of science in the United States. Its establishment climaxes 5 years of effort on the part of the executive branch, the Congress, and leading private citizens. Three months after I assumed Presidency in 1945, I received a report...[that] recommended the creation

of an agency, such as the National Science Foundation, to promote the development of new scientific knowledge and new scientific talent. It was assumed at that time that the world was close to an enduring peace. The Foundation was to be an instrument in promoting reconstruction and maintaining our wartime momentum in scientific progress. The fact that the world has not found postwar security in no way lessens the need for the National Science Foundation. On the contrary, it underscores this need... The Nation's strength is being tested today on many fronts. The National Science Foundation faces a great challenge to advance basic science research and to develop a national research policy. Its work should have the complete support of the American people (Jolly & Robins, 2016 p. 133).

Science was now the new doorway to a successful modern nation. Allocating funds and attention to careers in science would ensure technological advancements for America. The NSF Act also was a new beginning for gifted education (Jolly & Robins, 2016).

The United States Congress created more legislation inspired by scientific advancements. In 1957, the National Defense Education Act provided funds to improve gifted education in the areas of math and science as a direct result of the USSR launching Sputnik (Flint, 2014; Gallagher, 2015c: Gallagher et al., 2015; Jolly & Robins, 2016; National Defense Education Act, n.d.; Simpson, 2014). During this time, the US determined to be a leading competitor in the Space Race with the USSR. Continuing throughout the Cold War Era, government leaders were focusing on the GT students of the upcoming generation. GT students were not only considered assets at this time, they were a necessity (Flint, 2014; Jolly & Robins, 2016; Siegle, 2015a; Simpson, 2014).

Throughout the 1970s, GATE grew in both recognition and implementation. A

paramount moment in the history of GATE occurred in 1972 with the release of *The Marland Report* by US Commissioner of Education, Sidney P. Marland. This report provided a definition of giftedness, procedures for identifying gifted students, and exposure of the insufficiencies in gifted education in the American Public-School system (Marland, 1972). Marland's defining parameters for gifted education served as a catalyst for implementation of GATE. Educators and government leaders now had specific guidelines to help set standards in determining who was considered a GT student and how they were going to be educated. *The Marland Report* was a sign of progressing GATE in America (Olszewski-Kubilius et al., 2015; Pereira et al., 2015).

The influence of the *Marland* Report created a snowball effect for the promotion of GATE. The *Marland Report* includes statistics for GATE programs in each of the 50 states, establishing special classes for GT students as well as professional development for teachers and administrators. The acceptance of *The Marland Report* is referred to as, "A watershed moment in the field of gifted education and remains the touchstone for the field today" (Jolly, 2014; Jolly & Robins, 2016). This was a substantial push for gifted education, enlightening educators to the need for more training (Colangelo & Wood, 2015). In response, GATE workshops and conferences were held to train educators in the area of teaching GT students. As a result, gifted education was experiencing a great awakening (Jolly, 2014).

During this time, the government supplied grant money and training for gifted education. In 1978, the Gifted and Talented Children's Education Act was passed resulting in the creation of the National/State Leadership Training Institute on the Gifted and Talented (N/S-LTI-G/T) and the creation of: (a) Advanced Placement courses, (b) early college admissions, (c) mentorships, and (d) GATE pull-out programs (Jolly, 2014, Jolly & Robins, 2016). With these programs funded by grants, many GT students, regardless of socio-economic status, could excel.

These accelerated programs for GT students provided more avenues to highlight the most academically talented youth in America (Jolly, 2014). Opportunities for GT students were expanding with a bright future (Jolly & Robins, 2016).

As time progressed, the attention to GT students began to fade (Jolly & Robins, 2016). In response, the need to kindle the fire under the progression of GATE was unveiled through the Javits Act (Pereira et al., 2015). In this law, specific guidelines were set for promoting gifted education (Jolly & Robins, 2016). Jacob Javits gives his reasoning for his piece of legislation, the Jacob K. Javits Gifted and Talented Children and Youth Education Act, approved during the Presidency of Ronald Reagan:

Today, a decade since the passage of NDEA, the Federal effort toward meeting the needs of the gifted and talented has diminished to the point that there is not one single Federal law or program devoting significant resources toward the education of gifted and talented youth, nor does the U.S, Office of Education employ anyone with responsibility in this area (Gifted and Talented Children's Educational Assistance Act, 1969; Jolly & Robins, 2016, p. 136).

Javits was attempting to awaken the national leaders to the value of GT students (Coleman & Shah-Coltrane, 2015).

At this point in the United States, GATE was a utopian idea. The Javits Act lasted for almost three decades and was directed toward the education of special education students including the requirement of proving gifted education to all students identified as gifted (Adelson & Kelcey, 2016; Kettler, 2016; VanTassel & Hubbard, 2016; Wu, 2017). However, the implementation of this law has been neither consistent nor proportionate to the gifted student population in the schools and can be seen with a simple view of inconsistent fund allocations

(Kettler, 2016). The hopes for transforming GATE through the Javits Act were high but did not have a lasting impact (Jolly & Robins, 2016).

With the beginning of a new millennium, American leadership shifted the focus of educational legislation toward special education. Under the Presidency of George W. Bush, Congress passed the No Child Left Behind Act (NCLB), which shifted focus away from gifted education to school accountability for standardized testing (Brown & Garland, 2015; Jolly & Robins, 2016; Kettler, 2016; U. S. Department of Education, 2001). The government desired standardization for all students. In order to assess how close each student was to the national standard, the tests were administered in the schools, resulting in a pass or fail school status (Jolly & Robins, 2016; Ryser & Rambo-Hernandez, 2014). This broadened the view of education to the overall school level overlooking the individuality of the students (Brown & Garland, 2015; Gallagher, 2015c; Kettler, 2016).

As time progressed, a stronger desire for the equality of students grew (Jolly & Robins, 2016; Young, 2016). The focus on special education grew with the Individuals with Disabilities Education Act (IDEA), originally passed by Congress in 1975 (but has been updated since) specifically for special education students requiring academic accommodations (Pereira et al., 2015; U. S. Department of Education, 2004). The new concept of equality would be interpreted as helping students meet the national academic standards. With so much attention to the meeting average standards, the focus began to drift away from gifted and talented students (Brown & Garland, 2015; Ryser & Rambo-Hernandez, 2014).

Through the years, the focus of American education legislation has drastically changed (Jolly & Robins, 2016). In 2010, the Race to the Top program focused on providing funds for schools to produce college ready graduates (U.S. Department of Education, 2010; Ryser &

Rambo-Hernandez, 2014). Consequently, gifted students are not specifically mentioned in this program, but it is implied through the funding for increasing rigor in the schools (Brown & Garland, 2015; Ryser & Rambo-Hernandez, 2014).

At the national level, educational reforms lie in the hands of governments to prepare students for life as productive citizens in society (Frantz & McClarty, 2016; Gallagher, 2015c; Muratori & Smith, 2015). In America, leadership has drifted from valuing GATE to mold citizens to help create a future society. Looking around the world, American education is academically behind other countries. In society, when the education makes a downward spiral, the society in general will follow (Gallagher, 2015a; Gallagher, 2015c).

#### **Identification of Giftedness**

With the history of the progression of GATE laying a foundation for this research, another important aspect is understanding how children are identified as gifted and talented. Many researchers around the world identify high achieving students as gifted and talented, but the statement *gifted and talented* requires defining. Hence, the definition of gifted students was provided to the US federal government in *The Marland Report* as the following:

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

- 1) general intellectual ability
- 2) specific academic aptitude
- 3) creative or productive thinking
- 4) leadership ability
- 5) visual and performing arts and
- 6) psychomotor ability (Marland, 1972, p10).

This clear definition of what it means to be a GT student brings clarity for educators and legislators to create gifted education reforms (Abeysekera, 2014; Colangelo & Wood, 2015; Olszewski-Kubilius et al., 2015). Furthermore, a definitive explanation of giftedness helps when identifying and documenting GT students. With a cornerstone definition to explain gifted students, students can be accurately identified as gifted and talented (Barnard-Brak, Johnsen, Hannig, & Wei, 2014; Foley-Nicpon, 2015; Foreman & Gubbins, 2015; Siegle et al., 2016).

According to the research of Kaul, Johnsen, Saxon and Witte, identifying giftedness in children was the foundation to ensuring the proper education for them (Kaul et al., 2016). This concept is reinforced by DeNisco (2015) where she highlighted the importance of identification by stating, "The later we identify gifted and talented students, the more difficult it is to reverse their underachievement" (p 40). In accordance, Foreman and Gubbins (2015), justified how children's education is much more effective if the educators identify and document the giftedness in the early years. This guides the education system into placing the students in programs designed for the gifted and talented (Foreman & Gubbins, 2015). Therefore, to accomplish this task of identification, educators implement various methods to identify a child as gifted (Colangelo & Wood, 2015; McBee, 2016).

The identification process begins with the observations of the parents, teachers, and school faculty (McBee, 2016; Schroth & Helfer, 2017; Siegle et al., 2016). According to Kahveci (2015), even in a classroom of kindergarten students, there are some children who stand out above the rest in comprehension, analyzing and leading their peers. Siegle accentuated the importance of the teachers' role in the identification process by referring to them as, "talent scouts" (Siegle et al., 2016, p 116). Giftedness can be detected through the observation of the student's high level of ability, dedication to tasks, and creativity in comparison to the other

students the same age. When these signs are noticed, formal assessments follow them to measure the intelligence level (Kaya et al., 2015; Lakin, 2016; Long et al., 2015).

These formal assessments, or intelligence assessments, are described by Wormald, Rogers and Vialle (2015) as a common method of identification. IQ tests are simple assessments to affirm the instincts of the supervising adults (Cross & Coleman, 2014; Wardman, 2014; Warne, 2016). Gallagher (2015c), explained how these tests provide an objective way to document the findings of giftedness through the high scores of students. According to Flint (2014), students scoring a 130 on the IQ test are "identified as moderately gifted" (p69). Once the scores reveal giftedness, the need for special education is substantiated (Colangelo & Wood, 2015; McBee, 2016).

Through this identification process and after, schools keep records about students including the intellectual assessments for detecting giftedness. These assessments, along with the educator's observations, are kept in a portfolio for reference throughout the child's educational career (Cross & Coleman, 2014; DeNisco, 2015). Johnsen, Parker and Farah (2015), explained the importance of documenting the findings of giftedness to ensure proper academic placing of the students. For example, if a student relocates to a new school, his or her records will follow informing the new school of the special education required (Johnsen et al., 2015). The academic records aid in the academic nurturing of students as they grow and change through the years, documenting current assessments of their intellectual abilities (Cross & Coleman, 2014; Gentry, 2016; Jones, 2014; Kaya et al., 2015).

# **Classroom Atmosphere**

Once GT students are identified, Hébert et al. (2014), asserted that the role of teachers is to create the atmosphere in their classrooms. According to Young and Balli (2014), the teacher

and the classroom setting directly influence a student's education and indirectly influence their perception of self. Swafford, Baily and Beasley (2014), concurred that positive learning environments are like fertile soil, allowing the students to grow and bear fruit. The research of Simpson (2014), revealed the underachievement of GT students is often due to their mainstreamed placement in an educational atmosphere that inadequately challenges them in academics alongside unsuitable peers. Research has proposed that with the learning atmosphere being such a key component to the learning process, the idea of GT inclusion is not necessarily the best scenario (Gentry, 2016; Peters & Matthews, 2016).

In like manner, Fiksl & Aberšek (2014) explained how a successful classroom is based upon the atmosphere set by the teachers. Koshy & Pinheiro-Torres (2014) proposed that no matter what age level, gifted students flourish in positive academic environments that are accepting of GATE. Fiksl and Aberšek (2014) furthered that students recognize when they are accepted and embraced by the teacher. This feeling of acceptance is explained by Koomen & Jellesma (2015) where they showed that a sure sign a student does not feel accepted by the teacher is when he or she tells others that the teacher does not like them. In this kind of situation, Fiksl & Aberšek (2014) concluded that the student is apprehensive in the classroom and learning is discouraged.

To avoid discouragement in the classroom, Vuyk et al. (2016) stated that GT students require support and encouragement. The goal of GATE, shown by Lamb & Aldous (2014) is to facilitate, develop, and transform the students as they progress through their academic education, as seen through their e-mentoring study. They discovered that students build their knowledge base upon the experiences shared by the educators based upon an encouraging atmosphere (Lamb & Aldous (2014). This concept aligns with Bandura's development of self-efficacy

(Bandura, 1986). Building upon this premise, Wardman (2014) expresses that providing guidance through the education process helps the students achieve their goals. The study by Lamb and Aldous (2014) continued to reveal the importance of a mentoring relationship between the educator and the student. Their study revealed "the importance of understanding not only the production of knowledge regarding being gifted and talented, but also the processes in which it is transmitted, recontextualized, and acquired" (p315).

An understanding of gifted students is also presented by Coleman and Cross (2014) where they explained that sometimes GT students lag in academic performance and feel isolated because of their difference from other students. To reduce the impact of feeling different, Gentry (2016) shared how GATE programs focus on academic mastery and provide peers with similar abilities and interests. She encouraged homogenous grouping of GT students and continued to propose that accomplishing a task seems to be a lighter load when accompanied by like-minded thinkers (Gentry, 2016). The findings of Gentry (2014) revealed that GATE programs foster comradery among GT students, which, in turn, causes their bright minds to flourish. In GATE programs, according to Olthouse et al. (2014) the students do not feel superior to their peers which creates an inhibiting atmosphere.

The healthy learning atmosphere of GATE programs are explained by Moon (2016) as programs that challenge the students beyond their capabilities. VanTassel-Baska and Hubbard (2016) further described how GATE programs place emphasis on academic pacing, higher-order synthesizing abilities, determining high level interest areas, and interaction with similar intellectual students. Their study showed how proper scaffolding of critical thinking activities engages GT students (VanTassel-Baska & Hubbard, 2016). The stories presented in the study of Olthouse et al. (2014) expressed daydreaming in the classroom due to boredom. Gentry (2016)

expressed that in a successful GATE program, the students should be engaged in academic activities, not sitting in class bored. Gallagher (2015c) points out that GATE programs challenge the students to rise to higher levels and fine tune their intellectual skills.

## **GATE Teachers**

Coleman (2014c) described teachers who sponsor GATE programs as having a unique talent to nurture the brilliant minds of their students. Walker and VanderPloeg (2015) shared that gifted students require exceptional teachers, like those explained by Coleman (2014c), who can help nurture the comprehension, social issues and aspirations. Teachers with these abilities, as explained by Horak & Galluzzo (2017) connect with their students on a different level than in the average classroom. In classrooms with this type of teacher, GT students are comfortable enough to relax and show who they truly are according to the findings of Olthouse et al. (2014). Coleman (2014c) shared that teaching GATE programs inspires both teacher and students to exceed academic boundaries through the personal experience of a GATE teacher.

Green III, Donaldson, Oluwole (2014) pointed out that the purpose of a teacher is to help students academically progress from one level to another and these teachers are held accountable to this by law. Coleman (2014b) shared that part of a teacher's job is to assess the progress of his or her students and make instructional adaptations when necessary. According to Wright & Murray, (2015), throughout the school year, students complete assessments on content and learning goals providing the teacher with a glimpse of the students' understanding. Coleman (2014a) concluded that monitoring is the best insurance for academic progress.

To ensure the progression of gifted students, Beasley et al. (2017) proposed that teachers have higher standards set for progression monitoring. According to Laine et al. (2016), GT students need meaningful and challenging opportunities and resources to increase their potential.

Beasley et al. (2017 furthered that higher standards for GT students inspire them to rise to their potential. Fung et al. (2014) suggested if activities are too simple, GT students will not take them seriously resulting in academic remediation. The research of Simpson (2014) revealed that GT students need the inspiration of being challenged in the classroom. Fraser-Seeto et al. (2014) proposed that teacher professional development will help teachers effectively teach GT students with challenging classroom activities.

# **Instructional Strategies**

VanTassel-Baska & Hubbard (2016) explained how GT students require classroom activities at a higher level of thinking. Coleman supported this premise through his studies that showed there are many higher-order thinking strategies teachers may implement to enhance learning with gifted students with the simplest and most effective of these skills being teacher-directed discussion (Coleman, 2014a; Coleman, 2014b; Coleman, 2014c). According to Coleman (2014b), teachers, who implemented discussions in their classroom, expressed its effectiveness and consider it to be a best practice. The teacher in his study used a cognitive map as an excellent tool to help guide the class discussion (Coleman, 2014b).

The effectiveness of class discussion is explained by Gallagher (2015d) where he identified how GT students enjoy intellectual discussion and often love to share their knowledge with others. Gallagher (2015d) suggested teachers of GT students frequent the use of classroom discourse to stimulate motivation. In his study of classroom discussions, Coleman (2014b) revealed that gifted students learn more than the average peers around them through classroom discussions. His research further revealed that discussions energize the classroom and spark the interest of the students, especially the GT students. During discussions, GT students will continue to pose questions concerning the content matter which will further the discussion to dig

deeper into the information (Coleman, 2014b). Gallagher (2015d) proposed that GT students like to learn the depth of the content and then share what they learned, which reinforces the effectiveness of classroom discussion.

A classroom with GT students does not need to be inundated with complicated instructional strategies as suggested by Gentry (2016). Peters & Matthews (2016) proposed the simple strategy of grouping students per ability sets, which is easily implemented. The research of Wu (2017) explained how grouping GT students together will allow then to draw from each other's intelligence and the results will be superior. The findings of Wu (2017) further revealed that GT students do not perform well when grouped with peers far below their academic level. The study by Gentry (2016) showed that grouping students according to skill levels builds creative inspiration and increases academic progress.

Hébert et al. (2014) explained that GT students often are academically above the level of curriculum presented in the classroom. The use of curriculum from a higher-grade level is suggested by Kahveci (2015) as an alternative solution for differentiation in the classroom. He furthered that the use of alternate curriculum resources increases the academic rigor presenting challenging exercises for the students (Kahveci, 2015). Cross and Coleman (2014) supported the premise of Kahveci (2015) suggesting that providing challenging curriculum for the students reduces the possibility of underachievement. Karsenty (2014) pointed out that encouraging students to rise to higher standards is the objective for teachers of GT students.

The research of Delgado, Wardlow, McKnight, & O'Malley (2015) revealed an effective strategy that enhances gifted education is the use of technology in the classroom. Safitry, Mantoro, Ayu, Dewanti, & Azmeela (2015) proposed that with technology, students can increase investigative skills through research and present their findings through many different creative

ways. The research of Swan et al. (2015) explained how programs using technology bring opportunities into the classroom for gifted students that regularly would not be achievable based upon resources, funding, and locale through online courses and e-mentoring. Safitry et al. (2015) suggested that implementing technology engages the student in the classroom allowing them to venture off into research on their own. Delgado et al. (2015) expressed that students become comfortable to interact with technology and are comfortable working with it in the classroom.

Shaunessey-Dedrick & Cotabish (2014) explained how The National Research Center plays a key role in GATE research and development through creating an organized program of research that is focused and quick to respond to educational needs. The research studies of Laurence J. Coleman revealed how the findings of researchers, like his, revealed best practice methods for educating GT students, such as class discussions and other classroom activities (Coleman, 2014a; Coleman, 2014b; Coleman, 2014c, Coleman, 2014d; Coleman, 2014e). The study by Siegle et al. (2014) showed a high level of colleague collaboration among teachers in reference to instructional strategies implemented with GT students, according to the instrument created by McCoach and Siegle "to measure goal valuation (meaningfulness), self-efficacy, and environmental perception factors" of teachers (p 213). Studies, like that of Klavir and Goldenberg (2014), focusing on learning how to best educate GT students, are a continuing process of research.

## **Support for GT Teachers**

Teachers of gifted and talented students require support from their fellow teachers, administrators, and parents (Siegle et al., 2014). Fraser-Seeto et al. (2014) stated clearly, "When considering the unique characteristics and needs of gifted and talented students, it is clear that teachers play a central role in the academic success (or failure) of these students" (p2). When

presented with a professional development course on educating GT students, teachers expressed willingness to complete the training, so they could better meet the needs of their students (Fraser-Seeto et al., 2014). Gallagher (2015) stated that "teaching is an art" (p 24). He furthered that there are differences in the teachers' teaching styles where their level of excitement for the curriculum is seen along with their unique style of teaching (Gallagher, 2015)

According to the research of Siegle et al. (2014), teachers responded that they have someone located in the school to discuss GATE questions for support. These teachers, who participated in the study of Siegle et al. (2014), attended GATE professional development courses to gain instruction on classroom strategies to implement. The instruction in much of this professional development teaches how to implement high-quality classroom curriculum like that implemented in the study of Beasley et al. (2017), to strengthen GATE instructional strategies and perspectives. The study by Kahveci (2015) exemplified how easily available resources, such as classroom activities with newspapers, provide creativity to teachers seeking help with any insecurities they may have teaching GT students.

Gallagher et al. (2015) concurred that helpful resources are keys to increasing the success of GATE programs. Hence, teacher collaboration is vital for educators to share these resources (Coleman & Gallagher, 2015; Roberts et al., 2015; Wu, 2017). Wu (2017) explained how teachers shared strategies for curriculum differentiation for GT students. With the importance of teacher collaboration highlighted, Roberts et al. (2015) shared the problem of teachers having time for collaboration. They explained the benefits in administrators who allot daily collaboration time in the teachers' schedule include an increase of effective collaboration between the teachers sharing effective educational practices (Roberts et al., 2015). Van Tassel-Baska & Hubbard (2016) supported the need for teacher collaboration by stating that teachers

need ideas in content, pedagogy, and instructional strategies.

With the evident need for support in effective educational practices, Horak and Galluzzo (2017) pointed out that directed teacher professional development guides teachers into effective instructional strategies which create a positive classroom learning environment. Van Tassel-Baska & Hubbard proposed that teacher professional development should be continual throughout each school year and among not only several teachers, but several schools. Through this essential training, teachers will learn teaching skills effective in teaching GT students (Karsenty, 2014). Kahveci & Atalay (2015) referred to the professional development to learn effective teaching of GT students as "training to develop creative producers" (p105). Therefore, the more teacher professional development training, the more teachers learn to interact with GT students and become confident in differentiating lesson plans (Klavir & Goldenberg, 2014; Olszewski-Kubilius et al., 2015). Many times, school districts will either host or send their teachers to GATE conferences to glean information from a broader group of people (Siegle et al., 2014). According to Siegle et al. (2014) investing in teachers of GT students results in positive, confident teachers who motivate their students.

## **Educators' Perceptions of Gifted Students**

Yeung (2014) shared how educators are unclear in their understanding of the identification of GT students, leading to a skewed perspective. For this reason, many teachers express their discomfort with teaching students who excel in academic and functional abilities (Yeung, 2014). This discomfort sheds light upon many of the misconceptions and preconceived ideas concerning gifted students and GATE explained by VanTassel-Baska (2015b). One example shared by Muratori and Smith (2015), is when teachers think that a student is smart enough to figure things out on their own, without assistance. A teacher interacting with students

through a misguided perspective will end up being detrimental to the students as explained by the research of Baudson & Ziemes (2016).

Hébert et al., (2014), explained that when teachers prejudge the students before those students enter the classroom, a lower standard of education is set. The preconceived ideas teachers hold toward their students influence their amiableness towards instructional strategies and classroom procedures (Gubbins et al., 2014). Teachers' enthusiasm about their students inspire creativity with lesson plans and chosen instructional strategies which is evidenced in research (Baudson & Ziemes, 2016; Kahveci, 2015; Kahveci & Atalay, 2015). On the other hand, Hannig and Koop (2016) pointed out that the negative student perceptions of teachers will extinguish the flame of a teacher's enthusiasm and the results are seen through the classroom activities.

Per Gallagher (2015b), the most widespread misconception about GATE is the belief that in some way or another every student is gifted or talented. Educators who hold this belief feel educational attention should be directed toward the students with special needs struggling to meet the status quo (Finn, 2014). Brown and Garland (2015), concluded that educators with this mind set do not see the necessity for GT students to receive special education. With average standards serving as the focus of education in this manner, all of education is threatened by mediocracy due to the "unrealized potential" of GT students (Cross & Coleman, 2014, p 101).

Some teachers realize the major task of teaching gifted students is to keep them challenged and working at the academic level they need (Beasley et al., 2017; Gallagher, 2015d; Gallagher et al., 2015). The research of Horak and Galluzzo (2017) revealed that some educators feel inadequate to provide the necessitated rigor for GT students, to this, times of revealing a weakness will bring strength and unity in the end. Allowing GT students to shine in the

classroom, as suggested by Hébert et al. (2014), is the perfect formula for a successful learning environment. Their research suggested instructional practices that support and accept the GT students for who they are, with no stereotyping, are effective and is supported by other researchers' work as well (Hébert et al., 2014).

Some students, considered to be highly intelligent, appear to be ignored often by the average student and teacher (Muratori & Smith, 2015; Overzier & Nauta, 2014). Jung et al. (2015) proposed that among society, there seems to be an unsubstantiated premise that the concept of a student being identified as gifted is in some way elitist and it is unfair to other students for the GT to receive special attention. In this type of situation, the educator perceives gifted people to be in a different societal level and too highly intelligent to receive special education (Gentry, 2016). According to Adelson and Kelcey (2016), most school funding, staffing, and programs direct attention toward below average special education students because programs for those students are mandated by the federal government. Programs for GATE are mandated by the state and vary accordingly (Adelson & Kelcey, 2016; Johnsen et al., 2015).

Gallagher (2015a), proposed that the increasing prominent theme of equality in education is birthed from premises such as these. Many of the proponents of this premise substantiate their belief through the desire to treat all students with equity (Gallagher, 2015a; Gallagher, 2015c; Young, 2016). Brown and Garland (2015), explained how top pieces of legislation such as, IDEA and NCLB had great intentions but fell short in supporting GATE. Frantz and McClarty (2016), spelled out how countries, like the United States, are egalitarian, which focus on the push for differentiation and the treatment of GATE as special education. Young (2016), concluded that, "inequalities are created and distributed" (p245).

To this, Thomas Jefferson has the most fitting statement, "There is nothing more unequal

than the equal treatment of unequal people" (Yeung, 2014, p. 808). With every person being unique, the idea of equality is idealistic, substantiated by Finn (2014) in response to differentiation, "it is rare to find a teacher who can pull it off with 20 or 30 kids of widely differing levels of interest, aptitude, behavior, and previous learning" (p 57). Researchers pointed out that holding GT students to a standard, which they already far exceed, opens the door to disengagement (Abeysekera, 2014; Cross & Coleman, 2014). Klavir and Goldenberg (2014), asserted that the learning process is a nurturing process and should enhance every student, including GT students.

Each student deserves to be educated according to his or her abilities (Brown & Garland, 2015; Siegle, 2015a). Pereira et al. (2015), highlighted the uniqueness of each student and the need for individualized education in their study involving twice-exceptional students. Frantz and McClarty (2016), concluded that if the public sincerely believes every child is worthy of attending a school where academics are provided in direct relation to each child's place of development, then GATE is necessitated just as significantly as special education. Every student should be given the opportunity to be academically challenged to reach his or her potential (Laine et al., 2016; Moon, 2016; Schroth & Helfer, 2017). Gentry (2016), pointed out that GT students sitting in an average classroom far below their academic level begin to lose hope in education in correlation to struggling special education students who think they cannot do the work. Both groups of students should have access to specialized education (Adelson & Kelcey, 2016; Barnard-Brak, 2015).

The research of Jung et al. (2015), pointed out another misconception about gifted students is thinking that GT students will be fine mainstreamed in a classroom, where they will make adaptations on their own. This premise substantiated the rationale for not creating gifted

programs and not offering special services for GATE (Laine et al., 2016; Peters & Matthews, 2016; Siegle 2015a). Finn (2014), suggested that leaving gifted students to muddle through their education on their own abandons too many of our children. Gentry (2016) and Peters and Matthews (2016) agreed that differentiation is not effective and placing GT students in homogenous classrooms increases academic progression. Disregarding the growth of giftedness and talents in our young children is detrimental to each individual child as well as the entire public (Gallagher, 2015c; Muratori & Smith, 2015).

The reality of students possessing giftedness is valid (Baudson & Ziemes, 2016; Kaul et al., 2016; Laine et al., 2016). Laine et al. (2016), explained the Finnish view of giftedness and suggested that, "Optimal environmental factors such as support and opportunities are needed for persons to truly maximize their potential" (p 153). Cross and Coleman (2014), concluded that giftedness is both advanced development and creativity. Olszewski-Kubilius et al. (2015), substantiated the existence of giftedness through their detailed study of gifted definitions throughout the years. According to Coleman (2014d), the step toward GATE in the public schools is a small step in the right direction. With GATE programs in place all that is necessary is some reconstruction and expansion (Brown & Garland, 2015; Lamb & Aldous, 2014).

## **Social-emotional Effects of Giftedness**

GT students are special and have specific academic and social needs (Beasley et al., 2017; Hannig & Koop, 2016; Schroth & Helfer, 2017). The research of Coleman and Cross (2014), focused on the social and emotion effect of being a gifted student. They further highlighted that GT students feel their giftedness is a handicap (Coleman and Cross, 2014). A participant in the study conducted by Coleman and Cross (2014), stated, "Being one of the smarties isn't easy" (p5). The study conducted by Horak and Galluzzo (2016), revealed positive

effects of GATE programs are effective in both academic progress and self-efficacy, creating a positive learning atmosphere for GT students.

Even when students demonstrate giftedness, there is no set formula guaranteeing their success. Koshy and Pinheiro-Torres (2014) agreed with VanTassel-Baska (2015a) that a GT student is not restricted to a particular level of giftedness, but rather, his or her abilities are subjective to development or repression. The findings of Schutte, Wofensberger and Tirri (2014), explained how children are impressionable, needing appropriate guidance and mentorship through educational resources. According to Blass (2014), teachers with a negative perspective of GT students will suppress the creative abilities of these students to excel. She continued to explain that ignoring gifted students is detrimental to social-emotional development. Her research showed that "there is a positive correlation between poor social-emotional development and scholastic underachievement in gifted students" (Blass, 2014, p243). Students identified as gifted deserve special education to enhance their talents and abilities, urging them to maximize their potential (Kaul, et al., 2016; Laine et al., 2016).

To continue success in the GATE program, Scager et al. (2014) expressed that the participating students require guidance as they progress through grade levels. Colangelo and Wood (2015) explain how American schools monitor GT students as they progress from one grade level to another. As the students progress to the secondary level, Gagnon and Mattingly (2016) describe how attention focuses on the secondary grades for advanced placement courses and guidance from school counselors regarding college level education. These studies align with the goal of GATE stated by Gallagher (2015c) to help students excel academically.

Research conducted by Overzier and Nauta (2014) on gifted adults and how they deal with their giftedness, revealed that gifted adults are "sensitive to stimuli" and they "communicate

intensely" (p178). The gifted adults in this study reveal three groups of gifted adults: 1) does not function well ignoring their potential, 2) functions well through life, and 3) functions with help now and then (Overzier and Nauta, 2014). The research by Overzier and Nauta (2014) showed how GT students step into the world of adulthood continuing to deal with being gifted.

Considering the giftedness of adults brings light to the statement of Finn (2014) referring to gifted children "... who are the most likely to become tomorrow's scientists, inventors, poets, and entrepreneurs..." (p 50).

### **Underachievement of Gifted and Talented Students**

La Prad (2015) expressed that educational excellence must be intentional on the part of the educators. As seen in the work of Yeung (2014), the United States' educational system looks to those students who fall short of the national average of academic standards and encourages the teachers to focus attention on those students to bring equality. La Prad (2015) pointed out that excellence does not simply happen; it must be diligently instilled in the children to help them overcome whatever circumstances they may face at home or at school. According Ryser and Rambo-Hernandez (2014), differentiation for special education students is required by law according to the students' individualized education plans, but there is no such strict oversight of gifted students. For this reason, Brown and Garland (2015) concurred that GT students are often ignored in the classroom because they can complete the class assignments on their own.

Blass (2014) suggested that educators do not often view GT students as in need of special education. As pointed out by Jung et al. (2015), the expectation for these gifted students is to adapt on their own accord to the various differentiation and lack of instructional time they receive compared to the other special education students. Muratori & Smith (2015) stated that among educators there is an assumption that the GT students are smart enough to comprehend

the content or assignment instructions without help. Jung et al. (2015) proposed that with this type of teacher perspective, GT students are expected to guide their own learning so that the teacher may spend instructional time with the underachieving special education students.

Simpson (2014) suggested that a classroom atmosphere with an atmosphere that ignores GT students, sets the tone for underachievement of those GT students.

Coleman and Cross (2014) revealed that in America, being academically gifted is not always rewarded. Yeung (2014) explained, "Americans reward athletic ability, good looks, charisma and savvy but we are hesitant to reward excellence" (p. 817). He continued that being smart is not glamorous in America. Yeung (2014) shared his view that academic awards are given one time a year while the athletes are celebrated throughout their athletic season as superstars followed by awards given at the end of the season. Coleman and Cross (2014) referred to giftedness as, "a social handicap" (p 5). Yeung (2014) concluded that there appears to be a serious misplacement of priorities in American schools in the area of the importance of academics.

Hung, Badejo, & Bennett (2014) shared that positive reinforcement of performance and abilities inspires students to achieve higher goals. Gubbels et al. (2014) proposed that the lack of recognition for academic achievement causes some American GT students to grow lazy and not excel academically. Seedorf (2014) expressed that students lose motivation to excel when they are not being recognized for the achievements they are making. Preckel and Brunner (2015) explained how when facing a challenge, support and encouragement will serve as a breath of fresh air inspiring perseverance among students. According to Simpson (2014), underachievement by GT students should sound an alarm for educational leaders across the nation.

# **International Baccalaureate Diploma Programme**

Monreal (2016) explained that the International Baccalaureate Programme provides education with an international focus. Ryan et al. (2014) shared that IB has the precise goal of learning through international or intercultural academics with the following mission statement:

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people,

with their differences, can also be right (International Baccalaureate Organization, 2014).

Ryan et al. (2014) furthered that the desire of IB is to influence society by nurturing caring citizens who are academically well-prepared for adulthood. Saavedra (2016) shared that the IB curriculum requires teachers to implement instructional strategies that will reinforce this desire regularly. Saavedra (2016) proposed that IB schools have raised the standards for schools around the world.

Savage and Drake (2016) detailed how the high standards of IB are followed by high expectations of each student. Wright and Lee (2014) shared how IB schools implement internationally minded curriculum focused on critical thinking skills targeting for advanced learners fulfilling the mission statement through a set of learning outcomes called the Learner Profiles (LP). They explain how the LP are incorporated into every class and extra-curricular program and are for both the teachers and the students (Wright & Lee, 2014). Ryan et al. (2014)

expressed that the LP are set forth to accomplish the identification of characteristics students should aspire to achieve and educators should model before the school and the student. Saavedra (2016) discussed how the high standards of the IB Programme are detailed from the formation of the school to the implementation in the classrooms.

Saavedra (2016) explained how schools desiring to become IB schools undergo a rigorous process into the program. They detailed how during the candidacy period; the schools conduct extensive professional development with their faculty involving several visits from the IB (Saavedra, 2016). Saavedra (2016) shared that the whole process is considered an investment by the candidate school for their teachers. According to Saavedra (2016), once approved, the organization regularly visits the schools to ensure alignment with the IB educational standards. Monreal (2016) described how the IB has high standards and they enforce their standards for all grade levels.

Ryan et al. (2014) explained the high school program for IB schools is called the Diploma Programme (DP), consisting of a high school juniors and seniors. Corlu (2014) highlighted the accelerated course requirements are: (a) first spoken language; (b) foreign language; (c) History (called Individuals and Societies in the IB programme); (d) sciences with labs; (e) mathematics; (f) computer science; and (g) fine arts. Park, Caine, & Wimmer (2014) share how these high school students endure high standards with rigorous instructional strategies. Wright and Lee (2014) shared that the DP is considered accelerated, resulting in recognition by many universities. Ryan et al. (2014) shared that by the time of graduation, the students are well-prepared for higher education.

Saavedra (2016) pointed out that in addition to the rigorous required courses, there are three IB core requirements of the DP. Saavedra (2016) furthered explains that these courses

include: (a) Theory of Knowledge (TOK) course; (b) The extended essay; and (c) the Creativity, Action, Service requirement (CAS) and suggests that the purpose of these three requirements aims to teach the students to balance the acquirement and introspection of knowledge. Wright and Lee (2014) explained that the requirements reveal the students' knowledge base and involvement in the community around them. They continued to explain that the graduate requirements are more extensive than regular high school requirements but are fulfilling in the end according to the philosophy of IB, "... the philosophy of the organization is a commitment to educating the "whole person' and to preparing students for success 'in a global society...' (Wright & Lee, 2014, p. 203).

Saavedra (2016) pointed out that the TOK requirement is a philosophical course, serving as a focus of the DP. Saavedra (2016) described that in this course, the students study the various kinds of knowledge and how to obtain that knowledge through a global perspective.

Wright & Lee (2014) explained that the TOK provides a strong foundation for DP students.

They further explained that instructional strategies in the TOK course include Socratic seminars, research and class discourse to build student knowledge (Wright & Lee, 2014). Wright and Lee (2014) proposed that the more knowledge the student absorbs, the higher quality the final extended essay will be.

Park et al. (2014) detail how the extended essay requires each student to choose a topic from one of the six core subjects. The student must research the chosen topic and write a cohesive essay consisting of a minimum of 4,000 words exemplifying excellent writing skills set (Park et al., 2014). Ryan et al. (2014) shared that the students complete the extended essay on their own time away from school, with only critique and advice from their teachers. They explained that to alleviate bias, the IB organization grades the essay (Ryan et al., 2014).

Saavedra (2016) shared that the essay should exhibit the knowledge the student has obtained in his or her education but IB requires community service as well.

Ryan et al. (2014) described that the CAS requirement is flexible to the personality of the student. They further that to achieve the CAS requirement, DP students must record 150 hours of active learning outside of the classroom through community involvement (Ryan et al., 2014). Saavedra (2016) pointed out that the student's CAS project should exhibit their growth as an individual. Wright and Lee (2014) told that with this requirement, the students can be themselves and create something personal to them. Saavedra (2016) proposed that fulfilling the CAS requirement, opens the door to a life-long sense of citizenship responsibility with skills learned in high school.

Corly (2014) made it clear that the DP sets high expectations for the students to fine-tune independent inquiry and communication skills. These skills are then graded on a unique grading scale, which provides more subjectivity on the teacher's part of assessment (Corlu, 2014). Monreal (2016) pointed out that the skills of inquiry and communication benefit the students throughout adulthood. Monreal (2016) furthered that regardless of their career choice, learning these skills effectively helps them be successful. Ryan et al. (2014) explained that the IB strives to not only have high standards but to safeguard the fulfillment of these standards.

Corlu (2014) explained that the final requirement of high school seniors are the final exams. IB staff, who are not teachers in the school, proctors these exams and then sends them to the IB central office for grading (Corlu, 2014). Corlu (2014) made it clear that the IB ensures fairness and non-bias in every aspect of the exams given to the students. Saavedra (2016) reported that the organization is looking to see if the student has retained knowledge and understands the contents of the courses taken.

Saavedra (2016) told that students who acquire a satisfactory or higher score on the final exams, Extended Essay and Creativity, Action, Service receive an IBDP diploma. Monreal (2016) shared that the IB diploma has an amount of prestige behind it providing recognition by colleges and universities worldwide. According to Monreal (2016), "An international education helps placement in prestigious universities and builds crucial skills needed in a global economy" (p. 29). Wright and Lee (2014) furthered that this worldwide recognition of the DP is based upon the understanding that the DP prepares students to be successful in higher education and life beyond the classroom. Wright and Lee (2014) continued that many IBDP students transition into higher education following high school graduation. Monreal (2016) related that once through this rigorous program, the students have a strong academic foundation.

Kettler and Hurst (2017) suggested that IB nurtures students to build a better tomorrow. Conley, McGaughty, Davis-Molin, Farkas, & Fukuda (2014) shared that the goal of IBDP to create well-rounded, academically challenged students to move into higher education and experience success as a contributing member of society is an idealistic perspective. Conley et al. (2014) proposed that excellent educational standards result in superior students which shape a higher quality society. Savage and Drake (2016) explained that IB treats all students with high expectations, like they are GT students, and the results are positive.

Park et al. (2014) proposed that conquering the challenges of the rigorous IBDP provides a sense of pride for the students. Monreal (2016) supported this premise by sharing that many students feel the benefits of the program far outweigh the costs of the hard work. Monreal (2016) furthered that these students are goal driven and can look toward the result. Wright and Lee (2014) proposed that the IBDP students persevere because they understand the rewards of holding an IB diploma. Saavedra (2016) shared that the program itself is structured to support

and encourage the students throughout the process.

Ryan et al. (2014) shared that students are not expected to progress through the rigorous IBDP curriculum on their own. Kanevsky (2015) explained that inquiry based instructional strategies align with constructivist pedagogy, which provides interaction, respect, and support for all the students, and undergirds the foundational aspects of gifted education. Ryan et al. (2014) pointed out that the IBDP curriculum and instructional strategies are built upon a firm foundation. Saavedra et al. (2016) pointed out that the program prepares students for success, not failure. Ryan et al. (2014) explained that with the IBDP constructivist approach, GT students should flourish in the program.

Conley et al. (2014) shared that regarding the education of GT students, the IBDP was developed with high achievers in mind. They explained that IBDP schools exhibit consistency and reliability through their instructional strategies, which apparently are a good fit for GT students (Conley et al., 2014). Corly (2014) explained that the IBDP curriculum focuses on communication and inquiry, which stimulates the minds of GT students. Dedrick et al. (2015) pointed out that some researchers question whether the informal structure of an IB classroom in addition to the rigorous requirements and the stress related to attaining those requirements are well-suited for GT students.

#### **Summary**

Gifted and Talented Education is a necessity in the world of education (Frantz & McClarty, 2016; Siegle et al., 2016). Educators realize the importance of educating the small percentage of children with high intelligence, which do not always socially fit in with their peers (Baudson & Ziemes, 2016; Coleman & Shah-Coltrane, 2015; Gallagher, 2015c). This creates an awkwardness in the classroom learning environment for these students. If gone unchecked, the

awkwardness begins to influence their self-concept (Baudson & Ziemes, 2016; Hannig & Koop, 2016; Vuyk et al., 2016).

GT students did not ask for their giftedness (Cross & Coleman, 2014). This is the way they are and educators hold the responsibility to guide them in academics and life skills utilizing the social cognitive theory and social development theory that will help them understand their giftedness and utilize their gifts to become quality citizens in the society around them (Fraser-Seeto, Howard, & Woodcock, 2015; Koshy & Pinheiro-Torres, 2014; Thacker, 2017). Through the scope of the social cognitive theory and the social development theory, GATE provides a conducive learning atmosphere for students to scaffold knowledge and grow academically (Akella & Jordan, 2015; Moore et al., 2016; VanTassel-Baska & Hubbard, 2016; Wu, 2017). GT students realize they are different (Coleman & Cross, 2014; Cross et al., 2016; Simpson, 2014). These students in the classrooms are like valuable gems (Kaul et al., 2016).

There is a need for the world of education to broaden their perspective of GT students, who are part of the future society in our nations (Finn, 2014; Frantz & McClarty, 2016; Muratori & Smith, 2015). Preparing GT students for the task of leadership is a responsibility of educators. (Buchert, 2014; Renzulli et al., 2014; Steenbergen-Hu & Olszewski-Kubilius, 2016; Yeung, 2014). Rigorous academic programs provide great opportunities for these GT students, which include programs such as Advanced Placement and IB (Gagnon & Mattingly, 2016; Laine et al., 2016; Moon, 2016; Siegle et al., 2016). The goal of the IBDP is providing a broader global perspective, while implementing a rigorous academic program for students (Corlu, 2014; Fitzgerald, 2015; Park et al., 2014). The support and nurture of GT students is foundational to the future of society (Finn, 2014; Muratori & Smith, 2015; Steenbergen-Hu & Olszewski-Kubilius, 2016). What is implemented in the classroom today, is the future society of the nation

we will have tomorrow.

#### CHAPTER THREE: METHODS

#### Overview

The purpose of this transcendental phenomenological study was to describe the factors that supported the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes in Southeast United States. At this stage of the research, persevering factors are generally defined as characteristics such as academic rigor, family support, and community service, which lead to successful completion of the IBDP upon high school graduation (Monreal, 2016; Saavedra, 2016). The theories guiding this study were the social cognitive theory, by Albert Bandura, and the social development theory by Lev Vygotsky, as they relate the learning atmosphere to the knowledge acquisition of students (Bandura, 1971, 1977, 1983; Vygotsky, 1978). A transcendental phenomenological approach was used to confront four research questions: RQ1: How do participants, both educators and gifted and talented graduates, describe their experiences in International Baccalaureate Diploma Programmes?; RQ2: What specific instructional practices do participants identify as beneficial to their academic persistence in International Baccalaureate Diploma programs; RQ3: What challenges do participants face during their experience in the International Baccalaureate diploma program; and RQ4: What factors do the participants, both educators and gifted and talented graduates, attribute to the perseverance to high school graduation? This chapter explains the research design chosen for this study along with the rationale for the choice of that design. The setting for the study is described along with an explanation of the participants in the study. A description of the procedures and researcher's role are included. The methods of data collection and data analysis are explained. Finally, the trustworthiness and ethical considerations are discussed.

# **Design**

The purpose of this transcendental phenomenological study was to describe the factors that supported the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes in Southeast United States. At this stage of the research, persevering factors are generally defined as characteristics such as academic rigor, family support, and community service, which lead to successful completion of the IBDP upon high school graduation (Atkas & Guven, 2015; Fitzgerald, 2015; Monreal, 2016; Ryan et al., 2014; Saavedra, 2016; Wright & Lee, 2014). The theories guiding this study were the social cognitive theory, by Albert Bandura, and the social development theory by Lev Vygotsky, as they relate the learning atmosphere to the knowledge acquisition of students (Bandura, 1971, 1977, 1983; Vygotsky, 1978).

The participants' high school success is evident through graduation and entrance to college (Mazzeo, Fleischman, Heppen, & Jahangir, 2016). To achieve this goal, a transcendental phenomenological research design implementing intentionality and intuition was used (Moustakas, 1994). The origin of the word *phenomenology* dates to 1765 and is defined as, "...the science of describing what one perceives, senses, and knows in one's immediate awareness and experience" (Moustakas, 1994, p. 26). In a phenomenological study one goal is to separate personal beliefs, biases, and perspectives from the study (Moustakas, 1994).

To accomplish separation of self from the study, I exhibited intentionality or consciousness of personal interferences. Intuition in phenomenological studies may be described as a starting point for the study and then continues throughout the research driving me, as the researcher to learn more (Moustakas, 1994). A transcendental phenomenological design was chosen to discover the participants' personal experiences of the shared phenomenon of being

identified as gifted and graduating from the IBDP (Creswell, 2013). Through listening to these personal experiences, the participants were given a voice to share their perspectives, which allowed me to perceive the phenomena as if living out the experience.

The process of giving to the participants a voice was the focus of this study. As a first step in this process, epoche allowed me to set myself apart from the study through bracketing and utilizing a reflective journal. Following epoche, the process of Transcendental-Phenomenological Reduction helped me to perceive everything with a new perspective, as if for the first time. Finally, Imaginative Variation helped me to grasp a hold to the essence of the participants' experiences (Moustakas, 1994). The collected data was coded for emerging themes relevant to the research questions.

# **Research Questions**

The following research questions guided this phenomenological study:

- **RQ1:** How do both educators and gifted and talented graduates describe their experiences in International Baccalaureate Diploma Programmes?
- **RQ2:** What characteristics of classroom practices do educators and gifted and talented graduates identify as influential to the graduates' academic persistence in International Baccalaureate Diploma programs?
- **RQ3:** What challenges did educators and gifted and talented graduates face during their experience in the International Baccalaureate Diploma Program?
- **RQ4:** What factors do the educators and gifted and talented graduates attribute to the perseverance to high school graduation?

# Setting

Three states in the Southeast United States were represented in my study. Out of the 942 high schools in the United States offering the IBDP, there are fourteen IBDP high schools in Realism State, thirty-four IBDP high schools in Scholasticism State and eighty-five IBDP high schools in Progressivism State (International Baccalaureate Schools Organization, 2019). Four schools from these states are represented in my research. The demographics of these schools are as follows: (pseudonyms are used):

Table 1

Ethnic Demographics of the Study Schools

School	White	Hispanic	Black	Asian	Pacific Islander	Indian	Mixed Ethnicities
Realism State							
Aristotle High School	24.3	24.2	47.1	3.3	0.2	0.3	0.7
Scholasticism State							
Thomas Aquinas High School	59.7	2.4	33.4	1.2	0.0	0.3	2.9
Progressivism State							
John Dewey High School	29.1	4.6	54.3	0.0	0.0	0.2	11.8
Jean Piaget High School	48.8	6.8	25.9	15.1	0.1	0.2	3.1
Total Average	40.48	9.50	40.18	4.9	0.08	0.25	4.63

Source: USASchoolInfo, 2019

Table 2

Gender Demographics of The Study Schools

School	Males	Females	
Realism State			
Aristotle High School	52.1	47.9	
Scholasticism State			
Thomas Aquinas High School	48.2	51.8	
Progressivism State			
John Dewey High School	46.8	53.2	
Jean Piaget High School	44.2	55.8	
Total Average	47.8	52.2	
Source: USASchoolInfo, 2019			

There is a significant diversity in relation to socioeconomic status of the families in these school districts. I participants volunteered from these four schools. I interviewed the via the internet. I conducted the focus group in the meeting room of a neighborhood clubhouse near the families and friends of the participants.

# **Participants**

Five college freshmen or sophomores who graduated from an IBDP and five IBDP teachers comprised the participants for this study. The purposeful sample process was implemented for this research (Creswell, 2013). It was my intent to give a voice to GT students who have graduated from an IBDP and have entered college. These students, who have recently

completed the IBDP, were the best fit as participants in this research because they provided insight into their perspective of motivational factors, college preparedness, community mindedness, and other factors that contributed to their high school completion and college entrance. IBDP teachers were also participants that provided insight into the instructional strategies and other motivating factors in the school setting that they perceived led to the high school success of GT students.

For the sake of gathering only participant consent, all student participants were age 18 or older and enrolled in a college or university immediately following their high school graduation from an IBDP. The participants included male and female college students. Demographics of the participants are notated along with the demographics of their school in Table 1 and Table 2. Each participant was assigned a pseudonym in the study report for anonymity.

The requirement of the student participants being identified as gifted during their K-12 educational years was determined through their participation in GATE programs. To find participants, I gained permission from the school districts and contacted the school administrators of IB high schools via email. Due to laws protecting students with special needs, I was not allowed to discuss graduates of their IBDP who participated in GATE programs during their elementary school years. Once approval to contact teachers was given by the school administrator, I used mass emails and paper fliers to find teacher participants. A snowball sampling of recommendations from DP teachers and personal acquaintances comprised the remainder of the participants.

#### **Procedures**

The study was submitted for approved to Liberty University's Institutional Review

Board. Following IRB approval (see Appendix A), permission for the selection of participants

was sought from individual high schools in the Southeast United States that implement the IBDP. A letter describing the research along with a consent form (see Appendix B) was emailed to the pool of possible participants. I created a research website to serve as a connection base with my participants throughout the research. Upon receipt of consent forms, I conducted personal interviews to gather data. The participants were given the writing prompts to complete on their own time and return to the researcher via email. The focus group was conducted the in the meeting room of a neighborhood clubhouse near the families and friends of the participants.

The interviews and focus group were audio recorded. During the interviews and the focus group, notes were kept in a research journal notating body language of the participants and any necessary information pertaining to the atmosphere of the interview. The audio recordings of the interviews and focus group were listened to and transcribed by the researcher. The data collected was then analyzed looking for emergent themes.

# The Researcher's Role

I was the human instrument that collected, reduced and analyzed the data in this study of the perseverance of gifted and talented students of the IBDP. I had no connections with the schools the participants were associated with. As a mother and teacher of gifted students, it was vital for me to implement bracketing throughout the length of the study. I was forthright with all my participants sharing my research and information about myself. All my participants knew the degree I was working toward and the reasoning for my research. They were informed that I was a teacher.

I bracketed my thoughts before any data collection method. Moustakas (1994) refers to bracketing as looking at the data with a fresh viewpoint without bias. I accomplished bracketing through memo-ing my experiences and reflecting upon when I have faced similar situations to

my participants. I interviewed the participants individually with open-ended questions and probing to draw thick, rich, data. During the interviews, I listened rather than talked to hear the participants' experiences. According to Rubin and Rubin (2012), the researcher needs to be aware of biases not simply be neutral. It was important for me to separate my bias during the interviews and focus group through not agreeing or disagreeing with the opinions posed by my participants. During the data analysis process, I focused on the data by looking for emerging themes. Once again, the use of reflective memo-ing aided in setting aside any personal bias that I may hold in regard to the International Baccalaureate Diploma Program.

# **Data Collection**

I collected the data through a triangulation of data collection including individual participant interviews, writing prompts, and a focus group. The triangulation of data involves several sources of collecting data to ensure the connectivity of evidence of the shared phenomenon (Creswell, 2013). This process of triangulation is a vital part of qualitative research that adds credibility to the research (Lincoln & Guba, 1985). During the collection of data, I audio-recorded the interviews and focus groups. I transcribed these recordings. I also made field notes before, during, and after these times with the participants ensuring the process of bracketing throughout the research.

#### **Interviews**

The first data collection method was personal interviews with each of the participants (see Appendix C). Qualitative interviews are composed of open-ended questions to provoke the participants to share their experiences, perspectives, and opinions (Rubin & Rubin, 2012). In addition to the asking of open-ended questions, I used conversational management probing to elicit further information from the participants (Rubin & Rubin, 2012). Personal interviews

allow the participants to freely share about their experiences without inhibition about speaking in a group of people. I conducted the interviews via the internet and audio recorded each one. I took field notes during the interview, notating frustration, distractions and other relevant information. The interview questions focused on the experiences in the IBDP of the participants and challenges they may have faced allowing for these gifted participants to have a voice (Coleman, Micko, & Cross, 2015).

The answers from the interview questions allowed me to take an in-depth consideration of the experiences the participants had while in an IBDP and any challenges they faced while in the program. I utilized the use of broad questions suggested by Moustakas (1994) allowing for obtaining deep, rich data. Experts reviewed the questions to ensure alignment with the purpose of this research.

The purpose of these questions was to gain information about the participants' experiences in the IBDP during their high school years. The whole purpose in phenomenological studies is to discover a shared phenomenon based upon the experiences of the participants and align with the social learning theory, probing the participants based upon the social aspects of their learning environments (Creswell, 2013; Rubin & Rubin, 2012; Thacker, 2017). The questions are designed to elicit responses from the participants sharing their personal experiences (Rubin & Rubin, 2012). The questions covered all the variables of the research including giftedness, participation in the IBDP and influential factors outside of education.

Thick, rich, detailed information was gleaned from the participants' interview responses.

Participant Open-Ended Interview Questions

Graduates

- Please tell me a little about yourself. (Prompts: family, relationships, friends, likes and dislikes, life at college)
- 2. When did you first enter a GATE program?
- 3. Please describe your experiences in GATE. (Prompts: teachers, friends, activities)
- 4. Please describe your choice in attending an International Baccalaureate Diploma Program. (Prompts: friends, location, scholarship opportunity, accelerated classes)
- 5. Please describe your experiences in the IBDP. (Prompts: teachers, classmates, assignments, projects, grades, awards)
- 6. Please describe your view on learning.
- 7. Please describe classroom activities in the IBDP?
- 8. What do you feel about the IBDP was most challenging to you?
- 9. Please describe any challenges you may have experienced in the IBDP.
- 10. Please describe any supportive factors during your time in the IBDP.
- 11. What influenced your college choices?
- 12. What about your experience in the IBDP prepared you for college?
- 13. Please describe your transition to college.
- 14. Is there anything else you would like to share about your experience in the IBDP or your transition to college?

The first question of the interview focuses on having the participants provide a background of who they are and what they have experienced. This question helped the participant become comfortable with telling their story. The goal of this question was to elicit further information from the participants that helped search for context and richness of their experiences (Rubin & Rubin, 2012).

Questions two and three provided the opportunity for the participants to share their experiences in a GATE program. These questions provided insight into the gifted areas of the participants and what they experienced as being a part of a GATE program.

Questions four and five inquired specifically about the participants' experience in the IBDP. The participants had the opportunity to share their choice and experiences in the IBDP. Since this research focused on the IBDP, these questions provided beneficial information for motives for entering and completing the program.

Questions six and seven allowed the participants to share their personal views of learning and learning activities they enjoyed in high school. These questions helped me gain an understanding of what learning experiences the participants felt were effective in their learning process.

Questions eight and nine provided an opportunity for the participants to share challenges they experienced in high school. These questions enlightened me to aspects of high school and the IBDP that were challenging to the participants. The answers to these questions helped the interview elicit meaningful responses (Rubin & Rubin, 2012).

Question ten allowed the participants to share the areas in their lives where they received support that helped them work through the challenges they experienced in high school. This question helped me get a glimpse into the stories of the participants about their perspective of what factors supported them through a rigorous high school program.

Questions eleven through thirteen elicited the participants to explain their choice in college and how they felt they were prepared for college in high school. This helped provide me with an understanding of the participants' transition from high school to college.

Question fourteen was the final question and allowed the participants to share any further information they felt may contribute to my research. This question allowed for the participants to express their personality that may be beneficial to the research (Rubin & Rubin, 2012).

Teachers

- 1. Please tell me a little about yourself. (Prompts: family, relationships, friends, likes and dislikes, life at college)
- 2. Please describe your view on learning.
- 3. Please explain how you create the learning atmosphere in your classroom.
- 4. Please describe your experiences teaching GT students.
- 5. How long have you taught in an IBDP?
- Please describe your experiences working in an IBDP. (Prompts: training, activities, workload)
- Please describe your choice in working in an International Baccalaureate Diploma Program.
- 8. What do you feel about the IBDP is most challenging for students?
- 9. Please describe classroom activities in the IBDP?
- 10. Please describe any challenges you may have experienced while working in an IBDP school.
- 11. Please describe any supportive factors during your time working in an IBDP school.
- 12. What about your teaching experience in the IBDP prepares your students for college?
- 13. Is there anything else you would like to share about your experience working in an IBDP school?

The first question of the interview focused on having the participants provide a background of who they are and what they have experienced. This question helped the participant become comfortable with telling their story. The goal of this question was to elicit further information from the participants that would help search for context and richness of their experiences (Rubin & Rubin, 2012).

Questions 2-3 allowed the teachers to share their educational philosophy. Within these questions, the participants shared how they created the atmosphere in their classrooms. The answers from these questions provided me with firsthand information about the teaching style of these participants.

Question four deals specifically with teaching GT students. This question allowed the participants to share how they differentiate and plan for teaching GT students. Also, the participants were able to share specific experiences they have encountered with GT students.

Questions five through twelve focused the participants on aspects of the IBDP either through their personal experiences or their perspective of the program. These questions provided data from the teachers' perspective. I compared the responses from the graduates and the teachers looking for common threads of information.

Question thirteen was the final question and allowed the participants to share any further information they felt may contribute to this research. This question allowed the participants to express their personality that may be beneficial to the research (Rubin & Rubin, 2012).

The purpose of these questions was to gain information about the participants' experiences in the IBDP during their high school years. Question 1 was intended to be an opener to allow the participant to feel more comfortable during the interview process as suggested by Moustakas (1994). The whole purpose in phenomenological studies is to discover a shared phenomenon

based upon the experiences of the participants (Creswell, 2013). Questions two through fourteen were designed to elicit responses from the participants sharing their experiences. The purpose of questions two and three focused on being identified as gifted and experiences in GATE.

Questions four through ten were intended to gain information about the participants' experiences specifically dealing with the IDBP. Questions eleven through thirteen were created to discover how well the IBDP prepared the participants for transitioning to college. Finally, question fourteen allowed for any further information the participant felt would be beneficial to my study. In alignment with Lev Vygotsky's Social Development Theory, these interview questions probed the participants based upon the social aspects of their learning environments (Aldridge & Goldman, 2007; Gredler, 2011; Leonard, 2002).

# **Writing Prompts**

I asked the participants to write a letter according to the following prompt (see Appendix E) at their convenience and return to me via email. This writing prompt was created to gather meaningful and insightful data from the participants. As a second source of data collection, the written letters from the participants aided in the triangulation of data (Creswell, 2013; Gall et al., 2007). Having the participants complete the writing prompt in private at their convenience allowed for a comfortable atmosphere encouraging free expression of their lived experiences in the IBDP.

### **Focus Group**

I conducted a focus group with student participants who were attending college. Two of the participants were attending the same college and were home for summer break. The remainder of the students either lived nearby or were visiting with friends. The focus group was held at a clubhouse meeting room in a subdivision near the participants residence or friend's

residence. The purpose of the focus group was to gather more information from the participants to gain a better understanding of their experiences (Krueger & Casey, 2015). I provided sandwiches, chips, and cookies to help create a more relaxed atmosphere.

I guided the focus group discussion of the experiences and challenges of the participants during their time in an IBDP (research questions one and two). I audio record the session and transcribed it for analysis afterward. I began the discussion with the questions providing the opportunity for the spontaneity of the participants' responses to build the conversation (see Appendix F). These questions were created to elicit deep, detailed responses from the group encouraging the participants to speak from "the brain and the heart" (Kreuger & Casey, 2015, p58).

# **Data Analysis**

Upon completion of the data collection through personal interviews, writing prompts, and a focus group, I analyzed the data looking for emerging themes and pertinent information about the research questions. The data analysis procedures included epoche, preliminary grouping, reduction and elimination, clustering and thematizing, and textual-structural description, and essence (Moustakas, 1994). I reduced statements from the transcripts into categories for preliminary grouping (Moustakas, 1994). Then I clustered and thematized through organizing large portions of the data together and creating names for the categories (Moustakas, 1994). Once reduction and elimination had taken place, I reviewed the data looking for themes from the data to emerge. I created a structural description to determine how the participants experienced the shared phenomenon. I then merged these descriptions together to fully observe the essence of the participants' experiences (Creswell, 2013).

### **Epoche**

Imperative to qualitative research is the setting aside personal beliefs and preconceived ideas that could possibly influence the analysis of the collected data. This process is called epoche and should be the first step of data analysis (Moustakas, 1994). I bracketed my personal viewpoints regarding gifted students and the International Baccalaureate Diploma Program through memo-ing before, during and after the data collection process. This was in effort to provide a clean canvas for the data by setting aside my personal perspective and beliefs to reveal the phenomena occurring in IBDP leading to the success of gifted students.

### **Preliminary Grouping**

The next step of data analysis was the preliminary grouping of information (Moustakas, 1994). I completed the pre-coding of the transcriptions of the collected data through highlighting text and sorting through statements.

#### **Reduction and Elimination**

Once the data was coded and organized into groups, I completed the process of reduction and elimination. To reduce and eliminate, I utilized the following questions posed by Moustakas (1994): (a) "Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?" and (b) "Is it possible to abstract and label it?" (p. 121). Following these two questions helped identify the invariant constituents in the data (Moustakas, 1994). The reduction of data was as an ongoing step throughout the data analysis (Mayer, 2015).

### **Clustering and Thematizing**

I clustered the data and gave thematic labels after identification of the invariant constituents (Moustakas, 1994). This step in the process of data analysis helped me discover the logical order of collected data defining the phenomena of which factors encouraged high school

success of gifted students (Mayer, 2015). I created flow charts and mind maps to aid in this process.

### **Textural-Structural Description and Essence**

At this point in the data analysis, I used the collected data to create a textural description explaining the experiences of the participants and a structural description providing the context in which they experienced the various situations. The combination of these two descriptions of the participants explained the essence of the experiences. (Creswell, 2013). According to Moustakas (1994), presenting a textural-structural description of the participants' experiences is the final step in the data analysis process.

#### **Trustworthiness**

I addressed trustworthiness through several methods to ensure credibility, dependability, transferability and confirmability. These methods include triangulation of data, member checks, use of rich, thick description, bracketing, and peer review (Creswell, 2013).

# Credibility

According to Lincoln and Guba (1985), credibility is the highest essential aspect to establish credibility in qualitative research. Credibility reveals the internal validity of the research (Lincoln & Guba, 1985). Researchers exhibit credibility through meticulously presenting data in alignment with reality. I show credibility in this research through triangulation of data, peer review and member checks.

The triangulation of data is the use of several sources of data collection to substantiate any emerging themes of the data (Creswell, 2013). I completed this process through the three forms of data collection implemented in this study. Personal interviews, writing prompts, and focus groups enabled me as the researcher to study many aspects of the participants' shared

experiences. This allowed more validity than simply using one method of research. When themes are established from these various forms of the participants' experiences, they will add validity to the study (Creswell, 2013).

A peer review involves another person to review and critique the written research (Creswell, 2013). I completed this through the involvement of the research committee. They reviewed the research to ensure the identified themes are appropriately identified and labeled. This process substantiated the validity of the study avoiding researcher bias to infiltrate the data.

Member checks is the process of having members of the research approve the data collected ensuring effective communication of their lived experience (Creswell, 2013). I conducted these checks throughout the study. I provided copies of the transcriptions to each participant. The participants read the interviews to ensure their responses were communicated appropriately according to their intent.

# **Dependability**

Dependability was important to my study. Dependability in research may also be viewed as reliability and is closely related to credibility (Lincoln & Guba, 1985). Revealing dependability may be accomplished through using various methods of data collection to provide an in-depth consider the nature of the phenomena (Lincoln & Guba, 1985). I had a peer reviewer analyze my data collection methods including the questions to be asked to the participants. This was to ensure the questions would encourage thick, rich data and not mislead the participant.

# **Transferability**

The degree to which the findings of a study may relate to other phenomena is known as the transferability of research (Lincoln & Guba, 1985). One of the purposes of research is to provide a foundation for future research to be conducted. When a researcher ensures

transferability in a study, the research is strong and beneficial for future researchers. In this study, used the triangulation of data to increase the transferability of my study. I also used the use of rich, thick description to provide details for future researchers to make connections to create future research. The use of rich, thick description is when the researcher writes in detail various aspects of the study such as the setting or background of the participants (Creswell, 2013). While writing about this research, I wrote with extreme detail, enabling the readers to place themselves in the setting, providing the opportunity for others to experience the phenomenon of the participants.

# **Confirmability**

Confirmability in research ensures the data is presented in an objective manner. To obtain this goal, the researcher must be diligent to remove any bias or other interests when working with the data (Lincoln et al., 1985). I presented the data accumulated during this research without bias through the practice of bracketing. Bracketing is the process of the researcher separating herself from the research (Creswell, 2013). I completed bracketing through journaling and memo-ing. Throughout the study, I made notes before working with any part of the research and after. This allowed me to separate my influence from the actual data being collected and analyzed. Memo-ing helped throughout the process as well writing down my thoughts to set them aside from the research.

#### **Ethical Considerations**

Ethical considerations were applied during each phase of this study. According to Creswell (2013), ethical considerations should be ongoing throughout the research. To ensure protection of the participants and their safety, I obtained the approval of Liberty's IRB, and the school districts. All my participants completed the consent form before the interviews took

place. Ethical considerations were also included within my writing. All sources used in my literature review are properly cited and carefully paraphrased to keep the authors' intended thoughts.

For privacy and confidentiality, I conducted the interviews individually and used pseudonyms for each of the participants and the schools they are affiliated with. I was forthright with my participants and shared the purpose of my research with them as studying the perseverance of gifted and talented graduates of the IBDP. I used three methods of data collection and the participants had the choice in participating in any method they chose. I informed the participants that they could withdraw from the research at any time during the research process and any data collected from them not be used in the study

Additional ethical considerations were taken with the data collection. The interviews were scheduled at the convenience of my participants and conducted via the internet. To protect the privacy of the participant I conducted the interview in a closed office in my home and I was the only person in the room. I protected the data throughout the collection and analysis stage with the use of a password locked computer and a locked file cabinet for hard copies of data on paper.

### **Summary**

Chapter three describes the methods for undergoing the research to discover the persisting factors of gifted graduates of an IBDP. The research questions guiding the study are stated. The setting and participants are described to provide a more detailed picture of the shared phenomenon in this study. An explanation of the procedures including the data collection and data analysis methods give an insight to how the research was completed. Included are the questions for the personal interviews and focus groups, along with the writing prompt for the

writing activity. Finally, I have notated procedures to ensure trustworthiness, and ethical consideration are explained to provide validity to the study.

#### **CHAPTER FOUR: FINDINGS**

#### Overview

The primary goal of Chapter Four is to present the results of my study involving the perceptions of teachers and GT graduates of International Baccalaureate Diploma Programmes concerning factors contributing to completion of the program. This chapter presents individual descriptions of each of the IBDP teachers and graduates who participated in my research. The results are described from the analysis of the collected data from individual personal interviews, writing prompt activities, and a focus group meeting. The conclusion of the chapter provides a thorough examination of each research question, which guided my research during the study.

The purpose of this transcendental phenomenological study was to describe the factors that supported the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes in Southeast United States. The research studies the factors perceived as those which supported GT graduates of IBDP to high school completion from the perspectives of recent IBDP graduates and current IBDP teachers, seeking to find and analyze commonalities from the perspectives of the participants (Moustakas, 1994). The choice of a phenomenological study reveals the essence of the participants' experiences in an IBDP.

The research was phenomenological in nature because data was gathered and analyzed to describe the essence of the participants' perspectives including feelings and experiences in the IBDP (Moustakas, 1994). A transcendental, phenomenological study was chosen to discover the participants' personal experiences of the shared phenomenon of being identified as gifted and graduating from the IBDP (Creswell, 2013). Bandura's Social Cognitive Theory, with an emphasis on self-efficacy, and Vygotsky's Social Development Theory, with emphasis on the

Zone of Proximal Development was implemented as a guide for my research (Bandura, 1977; Vygotsky, 1978).

Throughout this research the researcher began analyzing the data by continually reading over the transcribed interviews, focus group transcription, and writing prompt responses to identify common themes that were emerging from the data. The researcher examined and determined some factors supporting the perseverance of gifted and talented students in the IBDP from interpreting the essence of the participants' experiences as told in the interviews (Moustakas, 1994). The stories of the participants are presented in this chapter. Each narrative provides a personal look into the perceptions of that participant's lived experiences.

# **Participants**

The participants in this study consisted of five IBDP teachers and five graduates of an IBDP high school. The teacher participants received their teaching degrees in various higher education institutions including Puerto Rico, Kentucky, Florida, and Tennessee. The graduate participants graduated high school from IBDP schools in the southeast United States. The graduates are attending college in higher education institutions across Utah, Georgia, California and Tennessee. Out of the ten participants, the ethnicities were as follows: 2 Hispanic Americans, 1 Asian American, 1 Native American, 1 African American, 4 White Americans, and 1 European American.

Pseudonyms were assigned to each participant and are reflective of their culture. A flow chart is provided showing how the participants were recruited and referred. Each participant is labeled in numerical order and connected by arrows to show how the referrals occurred.

Teachers one and two were referred by acquaintances the researcher met at work. Teacher number three responded to the research flyer left at the school where they work. From his

interview, he referred teacher number four. From the interview with teacher number four, she referred teacher number 5. Graduate number one was referred by an acquaintance of the researcher's mother. Graduate number two was a prior student of teacher number two and was referred following the interview with teacher number two. Graduate number three contacted the researcher following the interview with graduate number one as a referral. Graduate number four was referred by the son of the researcher, who knew her from college. Graduate number five was referred by the researcher's daughter who knew her from college. The criteria for these participants, explained in chapter three, remained constant throughout the recruitment time. A table is included showing the participation of the participants in the research.

Figure 1
Snowball Sampling Flow Chart

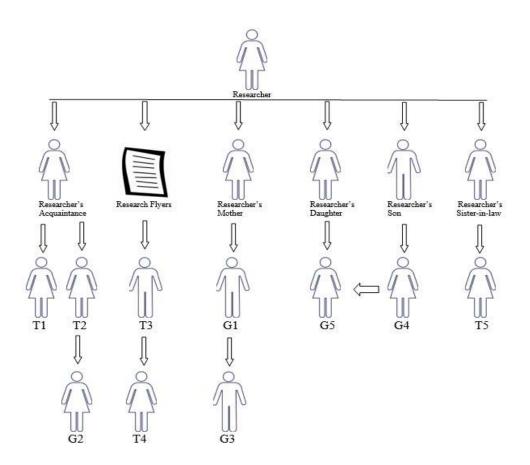


Table 3
Summary of Participation

Participant	Interview	Writing Prompt	Focus Group
Teachers			
Angelina	05/30/2019	05/31/2019	did not participate
Rose	05/30/2019	not completed	did not participate
Vincent	06/04/2019	06/04/2019	06/24/2019
Scarlett	06/05/2019	06/06/2019	06/24/2019
Zaria	06/24/2019	06/24/2019	did not participate
Graduates			
Levi	06/11/2019	not completed	06/24/2019
Sophie	06/11/2019	06/11/2019	06/24/2019
Carter	06/12/2019	06/12/2019	06/24/2019
Maria	06/15/2019	06/16/2019	06/24/2019
Takara	06/22/2019	06/22/2019	06/24/2019

# Angelina

Angelina is a 33-year veteran teacher, born in Puerto Rico and raised in a college professor's home. She teaches DP history. (Personal communication with interviewee, May 30, 2019). When describing why she chose the teaching profession, she states:

"Education was really big at home and dad did not play. I finished college in Puerto Rico began working as a schoolteacher, so I have always been a schoolteacher."

(Personal communication with interviewee, May 30, 2019)

Angelina has been an IBDP teacher for three years. When first introduced to the program she was not interested in it but over time has grown to appreciate its worth. Her struggles began when she was assigned to teach the DP course by the principal and continued from a lack of training her first year. She describes it as follows:

"The first year was really rough. I trained on my own. So, here I am, training on my own, every night, every weekend, spending so much time behind the computer looking for information on how to do this or how to do that. But that first quarter I tell you it was rough" (Personal communication with interviewee, May 30, 2019).

The inability to send her to training came from the school district where she was working. She would experience her first training session later that fall, following the end of the first quarter of the school year (Personal communication with interviewee, May 30, 2019).

Angelina's teaching philosophy is founded upon the uniqueness of each student and discovering how each of them learn. When asked about her view of learning, she states:

"You have to find the way of how this child will learn. Not everyone learns at the same pace. It's not a cookie cutter. You have all these children in the classroom, and they all learn differently. Patience has to be there, and you have to learn how to reach out" (Personal communication with interviewee, May 30, 2019).

Through Angelina's explanation of her view of learning she expresses a genuine care to see her students' growth in her classroom. She views herself as a servant to her students and strives to best serve each of them (Personal communication with interviewee, May 30, 2019).

Angelina's classroom consists of a mixture of teaching strategies. The assignments focus around group projects. She emphasizes discussions and writing assignments as well (Personal communication with interviewee, May 30, 2019). She explains her favorite group assignment as:

"They did a presentation on a pre-Columbian dinner. They had to identify these significant men and explore who are you sitting them by. What is the people's conversation? What is it that you are going to serve as a meal? And I said, 'Now keep in mind that they didn't eat what we eat today.' So that was interesting. It was really nice. They put together an invitation. One had like a scrolled paper. Someone had a simple pound cake for dessert, and they brought that to share." (Personal communication with interviewee, May 30, 2019)

Angelina shares about the writing skills of the students in her class. She expresses one of the biggest challenges she sees with her students as "citing evidence and making connections" (Personal communication with interviewee, May 30, 2019).

While working in an IBDP environment, Angelina shares some challenges she has faced in addition to her lack of training as misdirected students and providing firm assignment due dates. She struggles with students who have been admitted into the DP who she feels are not ready for neither the rigor nor the responsibility. She has overheard students proclaim that DP courses simply look good on a transcript regardless whether you make a low grade or not. For this challenge, she redirects the students to help them contemplate their motives. Her other challenge is standing firm with due dates on assignments and having to deal with backlash from students and parents when grades are reduced for late work (Personal communication with interviewee, May 30, 2019).

Angelina credits her coworkers as being her strongest support system. She explains how the teachers work together and check on each other to see how the other teachers are doing.

Together, the teachers share ideas, share concerns and simply help each other when a stressful situation arises (Personal communication with interviewee, May 30, 2019).

When asked about gifted and talented students in her classes, Angelina feels with some students she has to make the class more challenging and include creative assignments that will engage these students. According to her view,

"They don't want to be recognized as that talented student" (Personal communication with interviewee, May 30, 2019).

In order to support the higher level of these students, Angelina researches and provides higher-level thinking documents for the students to research making the assignment more challenging (Personal communication with interviewee, May 30, 2019).

Finally, Angelina discusses how her students are being well-prepared for college. To her, the biggest confirmation of this idea is when students return to see her following graduation (Personal communication with interviewee, May 30, 2019). She said many times the students come to see her with the following words:

"Now I understand why. Why you were so hard. Why you expected us to read. Why you make me write so much. Because now I get it. Why you were asking me to be so organized with my binder. Now, I get it. Now, I understand because it has helped me to be more successful and to take it at ease this first semester of college" (Personal communication with interviewee, May 30, 2019).

Angelina's final words are concerning working in the field of education.

"I think every day is a different scenario and that's one thing I think that is the beauty

within education. It's not a boring job but every day you have something new that happens in the classroom, with a student. Every day you open your email and it's something different, so it becomes a daily challenge" (Personal communication with interviewee, May 30, 2019).

#### Rose

Rose teaches DP higher level math and Advanced Placement statistics. She has taught for 30 years, with a total of seven years teaching in an IBDP. Throughout her years of teaching she has "taught every single course in math" (Personal communication with interviewee, May 30, 2019). When asked why she chose the DP math position she replies:

"Because it was an opening that was available to be honest. I kind of wanted the higher-level students rather than an Algebra 1 class and I just enjoy working with that level of students" (Personal communication with interviewee, May 30, 2019).

Rose explains her teaching experience as a job full of training sessions "to learn the right verbiage to tell the kids" (Personal communication with interviewee, May 30, 2019). She explains how IBDP has a language of its own. To her, it is an important responsibility of the teachers to understand and relay that language to the students. She describes the atmosphere of her school as extremely collaborative between teachers providing a strong support system (Personal communication with interviewee, May 30, 2019).

When asked about her view of learning, Rose shares how she believes that learning is ultimately in the hands of the students. She does think teachers should be "interesting and engaging" (Personal communication with interviewee, May 30, 2019). When it comes to the responsibility of the students she states:

"Learning depends on the student. They have to be self-motivated. They have to be self-responsible. They have to work hard. I would almost say its 60% or more their part to take that and run with it and learn. It's all there for them. I guide them through it. I give them examples, but I think learning is ultimately within the student" (Personal communication with interviewee, May 30, 2019).

When discussing the IBDP classroom, Rose shares how her classes are held to high standards with many collaborative expectations and independent work. She believes the high rigor is one of the biggest challenges for DP students. She explains how the students

"learn lots of different questioning techniques and lots of enrichment activities that go beyond to help prepare them for the exam" (Personal communication with the interviewee, May 30, 2019).

Rose describes challenges of being a DP teacher as keeping up with changes in the program through continual trainings and students who are placed in the program that cannot handle the rigor. She describes it as:

"I get frustrated with counselors who place kids in a higher-level math class who don't belong there. And you put in all this effort and the kid struggles and then they go take the exams and they don't do well, and you have put hours and hours and hours into them, and they don't make it. It's just DP is a beast of its own and I think students should be well vested before they are put in there" (Personal communication with interviewee, May 30, 2019).

On the contrary, she identifies a substantial support group in her school. She describes how the teachers are divided into teams. These teams have regular round-table style meetings to support those who are facing challenges and to celebrate successes. She credits teamwork to her success

and the positive atmosphere in her school (Personal communication with interviewee, May 30, 2019).

When discussing gifted and talented students, Rose expresses,

"I think DP is ideal for gifted students because they are going to progress at a fast pace" (Personal communication with interviewee, May 30, 2019).

She shares her experiences with twice exceptional students in her class and how they succeeded.

Rose explains the importance of being a good reader in her classes and credits gifted students with being high level readers, which she believes helps them to understand content on their own.

She followed this idea with,

"They can just do it on their own almost, it's like they don't need you almost" (Personal communication with interviewee, May 30, 2019).

Rose shares that the main support system the gifted students have at her school would be the guidance counselors and the administrators who observe classrooms and provide feed-back to the teachers (Personal communication with interviewee, May 30, 2019).

Rose states that students in her classes are well-prepared for college with the following statement,

"Well I think it's probably harder than some of the things they are going to do in college" (Personal communication with interviewee, May 30, 2019).

She shares that the accountability in the DP program along with the requirement of being prepared are other key aspects of preparing students for college (Personal communication with interviewee, May 30, 2019).

In a final statement concerning IBDP students, Rose shares,

"These students are very motivated, and they are very appreciative for what you are doing with them. They are constantly thanking you a little more than the average student they seem to really appreciate what you do" (Personal communication with interviewee, May 30, 2019).

She reflects upon many students who have contacted her upon receipt of their IB diploma to share their success and kept up with her during their freshman year of college asking for help in their college classes. For her, these gestures are rewarding (Personal communication with interviewee, May 30, 2019).

#### Vincent

Vincent is a second career educator. He is a veteran teacher of 13 years. Prior to teaching he worked in fortune five hundred companies in corporate America. He transitioned from the business arena to teaching high school English. He is an avid traveler and enjoys theater and concerts (Personal communication with interviewee, June 4, 2019).

Vincent has taught DP English/Literature for the past four years. He describes working in an IBDP school as:

"It's been an invigorating experience for everyone, not just the teachers but for the students. The focus on the learner profile trails and the focus on global mindedness and this focus on really a broad-based, more liberal education has been really a great one for our students and our school environment" (Personal communication with interviewee, June 4, 2019).

Vincent explains that working in a DP, "Has been a journey" (Personal communication with interviewee, June 4, 2019). When the school he works for became an IB candidate school, he was given the choice to transition to another school in the district. He chose to stay and work

through the transitioning into an IB school which included many training sessions and conferences (Personal communication with interviewee, June 4, 2019).

When asked about his view of learning, Vincent reflects on his own high school experience. He tells of his participation in the Model United Nations during high school and how the skills he learned through Model UN helped him throughout his high school years (Personal communication with interviewee, June 4, 2019). He shares:

"Good education should be modeled. It should be interactive. It should be student-Centered. It should involve a lot of student choice on the ideas and the areas to explore but it also needs to be set up in ways that are not only interactive, but that can be competitive so that students can compete with their peers and there's that aspect of how do I improve my skills with this in light of being competitive and winning" (Personal communication with interviewee, June 4, 2019).

Vincent also shares how he believes he would have benefited from participating in an IBDP when he was in high school based upon the programme being student-centered and global minded (Personal communication with interviewee, June 4, 2019).

According to Vincent, one of the biggest challenges of the IBDP is how the program strays from the ordinary grading system, along with the extended essay and personal projects. He explains it as follows:

"In the classroom, you know, the kids we kind of condition into a mode where they are used to their grade and they are used to the aspect that, I do the work, you grade it, and give me an A. And I think so many of the aspects of the IB model run contrary to that where the focus is not on the grades in the traditional sense" (Personal communication with interviewee, June 4, 2019).

Vincent explains how the IB 8-point evaluation scale differs from the county grading scale of A through F. He shares how he observes students having to change their mindset concerning grading. In his words:

"I think those parts have really challenged kids in ways that I think are healthy and I think we have built a structure in education that has transcended where again kids are performing work for this amount of points... It's really more about your mastery of skill. It's more about the journey and the reflection on your growth as a learner. And that's been very hard for a lot of our kids to wrap their heads around and adjust to. This new way of thinking about progress as a learner, their growth and development as a global citizen, that has been one of the harder things for our students to really get through" (Personal communication with interviewee, June 4, 2019).

In the classroom, Vincent tells of the shift from teaching standard and AP high school English to DP Literature and Theory of Knowledge. He describes the DP classroom as more engaging due to a higher level of discourse among the students. He implements alternative assessments and creative displays as class assessments. He shares how he sees the creativity of the students flow through these activities which, in return creates a more engaged student with the course content (Personal communication with interviewee, June 4, 2019).

As a DP teacher, Vincent admits his biggest challenge of learning and presenting the new terms and language of the IB program. He describes it as,

"I think that IB brings its own language to things. The hardest learning curve is just remembering to call things the right the right thing and then sometimes I think if the we are confused about that as educators, then what about our students?" (Personal communication with interviewee, June 4, 2019).

In response to this struggle, Vincent admits that the school provides much support by requiring the teachers to attend many trainings. He attends trainings both within his school district and out-of-state. During his years teaching as a DP teacher he has attended four out-of-state IB conferences. The district IB trainings occur during teacher professional development days and over some of the school year breaks. Vincent also shares about his supportive colleagues at the school. He specifically mentions the IB coordinator as a huge support system for the teachers (Personal communication with interviewee, June 4, 2019).

When asked about gifted and talented students in his classroom, Vincent expresses how he believes those students thrive in the atmosphere due to the amount of higher-level discourse. He explains how DP courses are not quite as structured as when he taught AP English. Now, his students have deep discussion about the content they are reading in the class and how that content relates to life in general. Vincent shares the difference as follows:

"They are learning in different ways that really push their thinking. And it's not nearly as structured so much. Yes, there are assessments in the end, but the work isn't so much focused on passing a test that year. There's that longer arc of instruction where they really can go into various topics in a meaningful way with some depth. I think it's just a lot richer the platform. For discussion and debate is much richer than it was for my students who had one year to get through an AP course and pass the AP test at the end" (Personal communication with interviewee, June 4, 2019).

The gifted and talented students in Vincent's classroom are given the opportunity to share their knowledge with their peers as well as learn from those around them (Personal communication with interviewee, June 4, 2019).

Vincent describes how the DP is supportive of gifted and talented students. The main support system he describes is how these students are grouped together in the DP classes (Personal communication with interviewee, June 4, 2019).

Another support is the focus on collaboration in the classroom. Since the GT students are grouped together in the same classes, they are more agreeable to collaborate with other students of their same level. Vincent explains how these students really refine one another. He also shares the higher level of training for DP teachers. At his school, teachers have go through an interview process to teach DP courses (Personal communication with interviewee, June 4, 2019). He says,

"They are informed of the extra expectations such as extra trainings they will be required to go to and the school is going to invest in you so if you get this particular spot you need to know what is expected of you" (Personal communication with interviewee, June 4, 2019).

Vincent believes the selectiveness in teachers is key for DP classrooms being so conducive for GT students (Personal communication with interviewee, June 4, 2019). He states,

"I believe in growth mindset, but I don't think you can throw any teacher a group of gifted and talented students and expect they are going to do as much for their enrichments as a teacher that has the capacity to work with them" (Personal communication with interviewee, June 4, 2019).

Vincent shares many aspects of the IBDP that prepares students for college. First, he explains how the DP programme requires students to take a wide variety of courses which exposes them to various topics. Next, he discusses the emphasis on speaking, listening and

writing as a strong preparation component of the DP for college (Personal communication with interviewee, June 4, 2019). He explains it as follows:

"I think that is really a big part of what is going to support their readiness for college is just building that that incredible skill of how do you engage in academic discourse at a high level using disciplinary literacy. And what I mean by that is, how do think about science like a scientist? How do you talk about math like a mathematician? Tt's like the students aren't just learning about a subject from the outside, they are learning about subjects from the inside and adopting that language of an actual practitioner in that particular skill" (Personal communication with interviewee, June 4, 2019).

Vincent shares that DP students learn to truly take ownership of their learning. To him, the best preparation for college is

"not just studying it but actually owning it" (Personal communication with interviewee, June 4, 2019).

# Scarlett

Scarlett is a veteran a high school history teacher of 20 years. She taught 7<sup>th</sup> grade social studies for four years but left middle school because

"I felt like I disciplined more than I taught" (Personal communication with interviewee, June 6, 2019).

She has taught high school history ever since. Throughout her years of teaching she has taught honors, AP and now DP history courses. She has taught DP history for two years. She serves as the history department chair at her school and received her National Board Certification last year (Personal communication with interviewee, June 6, 2019).

Scarlett shares how she is still new at teaching DP. She has only attended one in-depth DP training. That training helped prepare her for her first year of teaching DP. Since then she has attended a few small trainings with other DP teachers located in her school district. She does struggle with students in the DP at her school who she does not believe to be a strong enough student to handle the responsibilities of the rigor involved with the course (Personal communication with interviewee, June 6, 2019).

Scarlett was very excited about teaching DP history when the position was suggested to her. She enjoys teaching the class because of the freedom the setting allows in the content and activities. She describes how she was overwhelmed her first year of teaching but has worked through the uncertainty of new expectations and now has more confidence (Personal communication with interviewee, June 6, 2019).

When discussing her view on learning, Scarlett shares how she teaches using various teaching strategies, so each learning modality is engaged (Personal communication with interviewee, June 6, 2019). She states:

"I've always believed that students are capable of meeting my high expectations it doesn't matter what type of background they have. I believe they are capable. They just need some of the skills put into place to help them to achieve it: organization, writing practice, and things like that" (Personal communication with interviewee, June 6, 2019).

Since Scarlett teaches social studies, she also expresses her attentiveness to presenting many various perspectives on the content she is teaching (Personal communication with interviewee, June 6, 2019).

Without hesitation, Scarlett states that the biggest challenge for students in her class is "My expectations" (Personal communication with interviewee, June 6, 2019).

She continues to explain how she require students to be organized and complete timed writing assignments regularly. Her concern for the junior class students is that they will not take the exam for history until their senior year. For this reason, she feels the gifted students are a little too relaxed concerning their schoolwork and she does not want them to create lazy habits and then have to face the exam the next year (Personal communication with interviewee, June 6, 2019).

Scarlett describes the activities in her classroom as engaging for the students. The students complete collaborate assignments in which they study primary sources. Within these activities, the students must analyze the information provided looking for values and limitations. These activities help to prepare the students for their Internal Assessment (IA) which they complete toward the end of the school year. Included in the writing activities, Scarlett implements peer review and provides teacher feedback to the students. The students also complete document-based studies to comprehend the information enough to present a two-sided argument between groups of peers. Scarlett shares how her class participates in several Socratic debates. She explains how she does conduct 15-minute lectures at the beginning of each class to introduce the content to the students (Personal communication with interviewee, June 6, 2019).

When it comes to challenges Scarlett has experienced, her focus is on the feeling of needing more training. She desires to learn from others who have been teaching DP courses for much longer than she has. She explains how, in her first year, she was overwhelmed by the IAs the students completed. She had 125 students. That equated to 125 essays she had to grade in addition to her other classes she taught that were not DP classes (Personal communication with interviewee, June 6, 2019). She describes her challenge as follows:

"So, I did their history IA and I was freaking out. First of all, I was like, I don't feel

comfortable scoring these. I mean, I wanted more training to score them. I didn't feel the best teaching it. I kind of figured it out and then ultimately, I talked to somebody who taught at a different school who gave me some ideas. And then I ended up using my department teachers to help me score it. Because I was just trying to think like if it takes me 7-10 min per essay to score times 125 how much of my time is that? And that's just for three class periods I still taught 4 other classes. So, I was just like really stressed out about it. And it ended up working out fine so that was good, but it was just very stressful for me" (Personal communication with interviewee, June 6, 2019).

In addition to her struggle with the IAs, Scarlett shares how the other DP teachers felt the burden of these assessments. Her struggle was with the unknown. She wanted more training to know exactly how IB wanted the assessments graded. She explains how the DP teachers wanted to help each other,

"But we found out, more often than not, that we just didn't have the time to" (Personal communication with interviewee, June 6, 2019).

Scarlett describes her school administration as extremely supportive of the DP teachers. Any supplies she needs, the administration ensures she has them (Personal communication with interviewee, June 6, 2019). She explains the administration support as follows:

"The administration knows what we are trying to accomplish, and they gave me the opportunity to pull like 6 people from my department during a testing day to help me grade my IAs. And I couldn't have done that on my own. I needed the administration's support in order to do that" (Personal communication with interviewee, June 6, 2019).

She describes a work atmosphere consisting of colleagues and leadership that collaborate and are willing to help each other when necessary (Personal communication with interviewee, June 6, 2019).

When discussing gifted and talented students, Scarlett describes one student who was, "incredibly gifted" (Personal communication with interviewee, June 6, 2019). She explains how this student was engaged in her classroom activities, not only with the content and assignments but with the peers in the classroom. She feels the DP classroom was effective for this student because of the in-depth research needed to prepare for the IA. She also expresses the flexibility in the DP classroom versus the AP classroom. She describes how the DP classroom allows more time for discussion and research (Personal communication with interviewee, June 6, 2019). She expresses it as follows:

"If your gifted, smart and driven, then you're either going to go AP or DP. But I don't think, like I said in AP there's not a lot of room for exploring what you're interested in within the course. You're kind of limited in what is being offered. But for the IA, I said, 'This is what we have to do. These are the requirements and you can pick anything that interests you from these requirements.' And they were like, oh. It's not like, here is your prompt. Write. So, once they actually do the test, they can choose what interests them" (Personal communication with interviewee, June 6, 2019).

For GT students, Scarlett explains that it is like removing boundaries and allowing creativity to flow from them (Personal communication with interviewee, June 6, 2019).

According to Scarlett, DP courses prepare students for college because they learn to conduct in-depth research. She describes the large amount of writing completed in her classroom, which teaches the students proper citation and formatting. She expresses how

advanced level courses, whether DP or AP, will help prepare students for college due to learning time management skills. She points out that with the DP, the students are taking a full schedule of rigorous courses not simply picking one or two they may be interested in taking (Personal communication with interviewee, June 6, 2019).

#### Zaria

Zaria is a four-year veteran DP English/Literature teacher. She attended college in the same state where she grew up. She has a bachelor's degree in English and a master's degree in teaching. Following graduation with her undergraduate degree, Zaria pursued journalism. She then transitioned into a master's degree in teaching and has been teaching in a classroom for the past ten years. She was awarded with teacher of the year at the first school she worked in (Personal communication with interviewee, June 24, 2019). In this accomplishment she states:

"I don't want my tragedies to triumph" (Personal communication with interviewee, June 24/2019).

Zaria explains the multiple amounts of trainings she attends as a DP teacher (Personal communication with interviewee, June 24, 2019). She shares:

"We have more trainings than any other teachers at the school. We have IB training every year" (Personal communication with interviewee, June 24, 2019).

Zaria shares the focus of training throughout her department in the high school. She explains how each DP teacher in the English/literature department must collaborate to ensure all the mandated content is covered over the students' junior and senior years (Personal communication with interviewee, June 24, 2019). She states:

"We are teaching content that is required so the students receive their IB diploma" (Personal communication with interviewee, June 24, 2019).

Zaria stresses the importance of taking the DP classes seriously to her students. She reminds them of how many colleges will give them up to a year and sometimes more college credits for the IB diploma (Personal communication with interviewee, June 24, 2019).

Zaria bases her view of learning on building personal relationships with her students (Personal communication with interviewee, June 24, 2019). She shares:

"I believe that my experiences have proven that building a positive rapport with students is almost the essential foundation that you have to build with them to want to learn. I've learned that I don't want to be the cool teacher. I don't want to be the teacher that the kids like. I want to be one of the ones that the kids respect and that they can relate to on more than one level" (Personal communication with interviewee, June 24, 2019).

Zaria works to keep her classroom a safe environment for the students to know she is there for them. She always strives to make activities in her classroom relevant to her students (Personal communication with interviewee, June 24, 2019). She states:

"I have to have some sort of relevancy with them and they have to know how it connects to their future. I work really hard to develop a rapport with them where they feel like they can talk with me about anything, whether its educationally related or not. Because I have noticed when I have that connection with them, it makes my job as a teacher so much easier" (Personal communication with interviewee, June 24, 2019).

For Zaria, she believes building the relationship creates an active learning environment in the classroom (Personal communication with interviewee, June 24, 2019). She explains:

"Establish a relationship with the students so that you can create an environment of engage learning and application. Because if you don't, it's almost like they are getting what I call useless information. Like they are learning it, just because and after they

leave, they won't remember anything you said because they didn't learn it for a purpose, and it didn't connect with them in any way. And I want every lesson I do in my classroom to connect with them so they can take it and apply it to some other area in their life" (Personal communication with interviewee, June 24, 2019).

Zaria shares the challenge of having a classroom of students divided by ones who are smarter and not engaged and the other half who feels the work is too hard. She explains that the struggle is within creating a balance between these two situations (Personal communication with interviewee, June 24, 2019). She shares:

"I tell them all at the beginning of the school year, I said, 'Mastery of something does not mean you can just do it. Mastery means you can teach it to someone else.' I said, 'When you are in my classroom and you feel as if you have mastered something before I have even taught it, then if you can teach one of your struggling peers how to do it, then I will consider you a master. And I will consider you as, master whomever, in my classroom.' I said, 'So, I want a whole bunch of masters in here. So, by the time we finish, you'll be calling each other master'" (Personal communication with interviewee, June 24, 2019).

Zaria shares how this strategy separates her from the situation, allowing her to monitor the progress of the students as the year progresses (Personal communication with interviewee, June 24, 2019).

When working with gifted students, Zaria describes how her school separates the gifted students in the IB program in a separate building from the rest of the school. In her school IB teachers teach only IB courses. Zaria expresses how the students interact separately due to the separate buildings.

In her classroom, Zaria tries to make the lessons interesting to the gifted students by making relevant connections with the content to their lives (Personal communication with interviewee, June 24, 2019). She states:

"I always ensure that the lesson is engaging. I make sure the lessons are relative to them in some way. I try to pull the relativity out immediately and at the same time, I make sure it's challenging them" (Personal communication with interviewee, June 24, 2019).

Zaria feels she prepares her students for college through shaping their perspectives into being confident, independent, self-learners. She shares:

"I tell them, everything you do must be able to exude who you are. And when you get in college, it's easy to become just another number. It's easy to get lost in the masses but you have the ability to set yourself apart in everything that you do. That's when you know you are establishing your purpose. And I said, as long as you guys can see that you make everything you do uniquely yours, from your college application to your tests" (Personal communication with interviewee, June 24, 2019).

#### Levi

Levi is a freshman at a large religious university out of state from his home. He lives on campus so he can focus on his studies. He is majoring in engineering with a minor in music. In high school he was in band. He is an eagle scout with the Boy Scouts of America (Personal communication with interviewee, June 11, 2019).

Levi was placed in a gifted and talented program in elementary school (Personal communication with interviewee, June 11, 2019). He recalls the program as:

"They had a gifted and talented program that I was in but really all that meant was that I

had permission to check out different library books than everyone else. I don't really remember it being much more than that" (Personal communication with interviewee, June 11, 2019).

He recalls not making a grade lower than an A until the fourth grade. He shares that it was upsetting to him and to his teacher (Personal communication with interviewee, June 11, 2019).

Levi's transition into middle school was smooth until seventh grade in which he remembers having to complete homework outside of school (Personal communication with interviewee, June 11, 2019). He recalls it as follows:

"Seventh grade was a shock for me. In elementary school, from being in an advanced program as of sorts I still kind of didn't really know how to study or anything. I was just one of those kids that was smart enough to where I could pay attention in class and do well on the tests. And so, in seventh grade I actually had to like do homework outside of school" (Personal communication with interviewee, June 11, 2019).

According to Levi, this transition in seventh grade prepared him for the increase in homework assignments he would experience in eighth grade. (Personal communication with interviewee, June 11, 2019).

Levi's choice in applying to an IBDP was a mixture of parental expectations, an extracurricular STEM program's suggestion, and the school guidance counselor's suggestions. He believes that due to participating in the rigorous STEM program, he

"was already predetermined to take rigorous courses in high school" (Personal communication with interviewee, June 11, 2019).

Levi recalls his experience in IBDP courses as

"I couldn't say that they were much different than other classes" (Personal communication with interviewee, June 11, 2019).

He credits his participation in the STEM extra-curricular program for making his high school courses seem less challenging. Levi did experience a challenge in the math courses, but he expresses how that was a matter of stepping into a new content level that was unfamiliar to him. However, he does share how the teachers were supportive of student success. He specifically mentions how he enjoyed the literature classes and the Theory of Knowledge class (Personal communication with interviewee, June 11, 2019). He exclaims,

"I love writing. So that was really a highlight of my school was DP literature" (Personal communication with interviewee, June 11, 2019).

His enjoyment stems from the deep discussions the class would have about what they were reading (Personal communication with interviewee, June 11, 2019).

Levi shares his view of learning as the teacher being responsible to create an atmosphere where both the teacher and the students are working together (Personal communication with interviewee, June 11, 2019). He states,

"What really makes or breaks the classroom, at least for me, is knowing the teacher cares. And I think that's really where learning happens is where the student and the teacher both feel safe and comfortable and they are able to help each other grow" (Personal communication with interviewee, June 11, 2019).

He describes teachers that begin the school year very strict and then begin to loosen the rules as the school year progresses. To him, this just encourages the students to become lazy. He shares that he does not believe an effective classroom is where the teacher does not teach. He believes the teacher should be fully engaged with the students throughout the entire class period. He did

say that he feels students learn better when they realize their teacher is a fun and enjoyable person who cares about the success of the students (Personal communication with interviewee, June 11, 2019).

The only challenges Levi describes facing during his years in the IBDP was in his math courses. He describes the teachers of his higher-level math courses as foreigners to America. These teachers had strong accents from their native country (Personal communication with interviewee, June 11, 2019). This created a language barrier for Levi. He explains it as,

"In the classroom the teachers didn't really understand us, and we didn't really understand the teachers" (Personal communication with interviewee, June 11, 2019).

He describes struggling to understand and to communicate with his teachers. With this being high level math courses, he misunderstood some of the foundational concepts he needed to make learning the math concepts smoother (Personal communication with interviewee, June 11, 2019).

In the classroom, Levi explains the focus of all his classes was timed writing assignments. He shares how looking back he sees that all the timed writing activities prepared him for the IAs and extended essay he had to write (Personal communication with interviewee, June 11, 2019). Levi describes an activity in his class that was helpful for him as:

"In lit, we watched a lot of criminal minds and we talked about the episodes and we were able to analyze and predict things in literature a lot better after that" (Personal communication with interviewee, June 11, 2019).

In addition to writing Levi, also expresses the amount of class discussion that occurred in each classroom. Finally, he shares how he studied documents in his history classes looking for information about the content in the documents. He shares how his history classes were not very engaging to him (Personal communication with interviewee, June 11, 2019).

Levi describes his teachers in the IBDP as very supportive of student success. The teachers made after school tutoring available for students in need of help (Personal communication with interviewee, June 11, 2019). He explains the classroom atmosphere as:

"All the teachers were very helpful. I guess you could say I would have been comfortable going up to any of my teachers, in any of my classes and saying, 'Hey, look I don't understand this.' But I found that almost all of my teachers prepared us in such a way that you didn't have any excuse if you did fail. They really did a good job preparing us for their assignments and for the IAs" (Personal communication with interviewee, June 11, 2019).

Levi's family has a strong influence on his choice in colleges. The university he chose is part of his family's religion and offers reduced tuition for church members. Levi said he did not have a problem with going to the school because

"It's recognized as a pretty good school" (Personal communication with interviewee, June 11, 2019).

Levi has experienced an easy transition into college (Personal communication with interviewee, June 11, 2019). He states:

"College has been a breeze for me" (Personal communication with interviewee, June 11, 2019).

He admits that he does take college seriously because of a personal experience (Personal communication with interviewee, June 11, 2019). He shares,

"I have a friend whose brother went to college and at the end of his first year you could put a decimal in his age and see his GPA" (Personal communication with interviewee, June 11, 2019).

Levi gives credit to his DP courses and his extra-curricular STEM program in helping him feel comfortable with the workload he experiences in college (Personal communication with interviewee, June 11, 2019). He states,

"So, I think it was the higher expectations of the DP and STEM program that just slowly transitioned me into a higher level of difficulty and made me a better student with that" (Personal communication with interviewee, June 11, 2019).

# **Sophie**

Sophie is a freshman at a small state university close to her home. She lives at home and commutes to school, while working a part-time job. She is majoring in visual design with hopes that upon graduation she will find a job with computers as a graphic artist (Personal communication with interviewee, June 11, 2019).

Sophie was placed in a GATE program in first grade. She remembers going to school and then riding a bus to a different school for GATE classes (Personal communication with interviewee, June 11, 2019). She recalls:

"So, we would load up on a bus and go to a different elementary school. And they would have classes that were different like astronomy and classes about dinosaurs and stuff like that" (Personal communication with interviewee, June 11, 2019).

In these classes, Sophie remembers how the teachers made learning fun with various hands-on activities (Personal communication with interviewee, June 11, 2019). She states:

"I remember in the astronomy class. They were teaching about astronauts and how they had to eat out of plastic bags. So, we did this thing in class one day where we put food in plastic bags and then ate it; which sounds really weird but they wanted us to get the feel

of like how astronauts were when they were in space" (Personal communication with interviewee, June 11, 2019).

By the time she entered middle school, Sophie explains that there were no more special GATE classes she was just placed in advanced classes for math and English. She shares how her middle school math classes consisted of various collaborative projects with her peers (Personal communication with interviewee, June 11, 2019).

Sophie explains that her decision to apply to the IBDP was to aid in college acceptance. Sophie's counselor informed her that college credit could be earned with an IB diploma and that was how she made her decision. She also had made friends in the IB magnet school and desired to be with her friends. One of which, she knew since the fourth grade (Personal communication with interviewee, June 11, 2019).

Sophie describes her years in the DP as

"very stressful, especially particular classes" (Personal communication with interviewee, June 11, 2019).

She explains how the class depended upon the teacher (Personal communication with interviewee, June 11, 2019). She recalls:

"It was kind of like a hit or miss with teachers. Some teachers were, like, easy going and it made the class like relaxing. But another one of my teachers was very, like, kind of uptight and it made the class feel, like, stressful. And made you feel like I'm doing stuff wrong and am I gonna fail, which I wasn't because it was just one little thing" (Personal communication with interviewee, June 11, 2019).

For Sophie, the biggest challenge of the DP was knowing that the content of her classes was culminating for the exams she would take during her senior year. She shares how much pressure

she felt her senior year taking the exams and completing the extended essay (Personal communication with interviewee, June 11, 2019).

Sophie's view of learning is based on hands-on activities. She explains how hands-on activities helps her understand the content through experiencing it. She shares how she comprehends information better if she is engaged with the content. She wants to know why she needs to learn something and why that information is useful (Personal communication with interviewee, June 11, 2019).

Sophie recalls activities in her DP classes as mostly engaging. She describes science projects that were completed as groups in which she was sitting in the class. In math, she remembers,

"We used M&Ms to figure out math equations" (Personal communication with interviewee, June 11, 2019).

In literature and history, she remembers many timed writing assignments. She recalls deep discussions in class about the literature they were reading, the history topic they were studying or the TOK topic they were discussing. She also remembers studying historical documents that the students then used to support their stance in class debates and discussions (Personal communication with interviewee, June 11, 2019).

Sophie shares how all of her teachers were very supportive. The teachers would offer tutoring before and after school. She also explains how the school had an afternoon homework help time after school to help students with their homework. In her view, this homework help time was not very helpful. Sophie also explains how her friends were a strong support during her DP years. She explains that sometimes her friend could help her more than the teacher (Personal communication with interviewee, June 11, 2019).

When it came time to choose a college, finances were the deciding factor for Sophie. She chose her college close to home because it credited her for her IB diploma. She decided she would stay at home and save money (Personal communication with interviewee, June 11, 2019). Sophie explains,

"I didn't feel like I was ready to move away from home. I had just gotten my first job and just gotten my driver's license. So, I wanted to stay home. And I had a lot of friends who go to the same college and are in the art program. So, I decided to go with that" (Personal communication with interviewee, June 11, 2019).

Sophie expresses that beginning college did not make her very nervous. She had received credit for several general education credits the school required from her IB diploma. In her college courses she realizes she was overprepared for college (Personal communication with interviewee, June 11, 2019). She shares,

"I, like, know how to write, like how to listen for what the professor wants. So, I write the assignment like he wants it. I feel like without my DP experience, it would have been a lot harder. So, I had already learned how to write and create power points' (Personal communication with interviewee, June 11, 2019).

#### Carter

Carter is a freshman at a state university in a large city, majoring in business administration. He commutes to and from school from a suburb outside of the large city, while working a full-time job. He was band captain his senior year of high school and is passionate about music (Personal communication with interviewee, June 12, 2019).

Carter was placed in a GATE program beginning in fifth grade when he transferred from a private Christian school into the public-school system. In this program, the students attended

classes at a different school. These classes focused on critical thinking and in-depth discovery of content. Carter explains that by middle school and throughout high school the gifted students were scheduled together in advanced classes. He feels that they were labeled gifted and not much more (Personal communication with interviewee, June 12,2019). He states:

"So then in middle school and high school it's just been pretty much just a label for me in classes with students with similar academic abilities and we just performed at a higher academic level" (Personal communication with interviewee, June 12, 2019).

Carter describes his classes in middle and high school as more rigorous than the standard classes (Personal communication with interviewee, June 12, 2019).

Carter was encouraged by his parents to continue on the IB path into the Diploma Programme. They saw the opportunity for college credit at the end of his high school years. Carter explains that his parents have been a source of encouragement for him but ultimately it was his decision (Personal communication with interviewee, June 12, 2019).

Carter describes his DP classes based upon the teacher in the classroom. Carter recalls enjoying the literature classes most. He explains how they would read literature or plays and have a deep class discussion about the content. Following the discussion, he remembers writing about the literary work. He expresses his desire to write was influenced by these teachers. Carter also shares the teaching strategies of his math teachers. He explains how the teacher presented them with the work and would have the students explore the new concept on their own. If the students had trouble with the new concept, the teacher would stop the class from working and explain the concept providing examples (Personal communication with interviewee, June 12, 2019). Carter recalls:

"I really liked that because I could work until I hit a wall and say hey teacher, I need

some help here. What's going on? And he would explain it to me. He would give us a topic like general equations and give us a worksheet and say go. So, if everyone was having problems then he would stop us and write some examples on the board and show us how to manipulate it until we could work it" (Personal communication with interviewee, June 12, 2019).

In contrast to his math teacher, Carter shares how one of his history teachers would give pre-tests prior to lectures. He shares how that teacher mainly lectured in the classroom. Carter shares how that method of teaching was frustrating to him causing him to disengage from what was going on in the classroom. Carter tells of the many group projects and presentations were required in his DP courses. He recalls the focus his teachers placed on collaboration. Carter expresses how he would have preferred to work independently that have to collaborate so often (Personal communication with interviewee, June 12, 2019).

Carter believes that a classroom learning environment involves active engagement by the teacher and the students (Personal communication with interviewee, June 12, 2019). He states:

"I think it should be a perfect mix between a teacher giving you information and staying on top of you at the same time while allowing the student to explore and learn on their own" (Personal communication with interviewee, June 12, 2019).

Carter expresses that a teacher should be a guide for the students. He feels teachers should reach out and help students by not allowing them to get distracted from the content (Personal communication with interviewee, June 12, 2019).

Carter shares his biggest challenge in high school was procrastination. He admits to preferring sleeping or playing video games to completing homework assignments. He realizes the need in studying (Personal communication with interviewee, June 12, 2019). He shares:

"I never really was one to study. I think I spent a total of three whole hours during high school studying. I think that definitely killed me" (Personal communication with interviewee, June 12, 2019).

Carter explains the different support systems he had throughout his DP years. He shares how supportive his teachers were during high school. The teachers built a relationship with the students. These relationships, according to Carter, made him comfortable to contact his teacher either in person or via email when he was struggling with something. Carter also expresses how the students supported one another in their classes (Personal communication with interviewee, June 12, 2019). He recalls:

"Someone in the class started a massive group text conversation. And it was about 50-60 students involved in that group. And if anyone had a question, they would post it to the group and one of the star students would rather quickly respond. It was just nice to see students working together on that one" (Personal communication with interviewee, June 12, 2019).

Carter expresses that through his DP years in high school he did not feel isolated or alone (Personal communication with interviewee, June 12, 2019).

Carter's choice in colleges is mainly financially motivated. The college where he applied gave him credits for his DP courses which saved him in tuition expenses. He also can live at home and work full-time since he is close enough to commute to his college classes. Carter shares that the school also has some classes online that he has been able to register for, once again helping with time management with his work (Personal communication with interviewee, June 12, 2019).

Cater shares how no class he has taken in college so far compares to the rigor of his high school classes in the diploma programme. He explains his transition to college as,

"It's really not a big deal. I feel like they overprepared me. And I just feel really good about it" (Personal communication with interviewee, June 12, 2019).

He credits this smooth transition to the various teaching styles and strategies of his DP teachers. Carter shares how he would get angry at his teachers for thinking they did not provide him with enough information to complete assignments. This anger would make him feel like he was in a losing struggle with no chance of success (Personal communication with interviewee, June 12, 2019). He states:

"Occasionally I would feel angry. Like I wasn't given enough information. Like the cards were stacked against me, feeling like I just wasn't given enough. Of course, I look back now and see I was given enough. I just didn't apply it in the right way" (Personal communication with interviewee, June 12, 2019).

#### Maria

Maria is a sophomore at a small religious college out-of-sate from her home. She lives on campus and works a full-time job on the college campus. Maria grew up in a single parent home located in a lower income area and was on the free lunch program when she went to school. Maria was involved in many extracurricular activities from elementary throughout high school (Personal communication with interviewee, June 15, 2019).

Maria began her education in a preschool program and began GATE classes in the first grade. She remembers building bridges and working critical thinking puzzles in those classes. She recalls one year competing in a bridge building contest between other GATE students in the school district. She shares how in her GATE classes; the teacher would introduce a topic and

then the class would have a long time of discussion about that topic. She explains how the teacher was not looking for answers but wanting the students to critically think about the topic (Personal communication with interviewee, June 15, 2019). Maria describes her experience as:

"In second grade I was in the fifth-grade reading level group. So, it was kind of weird. So, I was always the youngest one in all of these classes but then in fourth and fifth grade I went to a magnet school. Because they had more advanced classes that would engage me" (Personal communication with interviewee, June 15, 2019).

Maria continued in the magnet program in middle school taking advanced classes and entering the IB program in high school (Personal communication with interviewee, June 15, 2019).

Maria feels like she did not have much of a choice in entering the diploma programme.

She states:

"I was in the magnet program. So, I just followed the IB magnet program. And applying to DP was just the next step in the IB magnet program" (Personal communication with interviewee, June 15, 2019).

Maria remembers her DP classed as rigorous classes which required a heavy workload. She shares how many of the teachers would lecture as part of the class and then implement various teaching strategies in the classroom. Maria describes a heavy workload of reading and timed writing assignments where the students would have to research the topic prior to writing. She remembers completing several Socratic seminars in many of her classes (Personal communication with interviewee, June 15, 2019). In reflection, she states:

"I felt like all the classes I took were really well put together and the teachers really knew what they were talking about" (Personal communication with interviewee, June 15, 2019).

Maria shares a challenge she faced in the DP calculus class she took. In this class, there was a change in teachers after the beginning of the school year. The new teacher was a math teacher that had never taught calculus before. Maria shares,

"So, that class was like I was teaching myself everything" (Personal communication with interviewee, June 15, 2019).

Maria also explains not being able to engage in another teacher's class (Personal communication with interviewee, June 15, 2019). She shares,

"One of my classes, the teacher was kind of a slacker. So, I just didn't get into it. She had a good command of her subject but I just wasn't engaged in her class" (Personal communication with interviewee, June 15, 2019).

Maria expresses her biggest challenge in her DP classes was keeping up with the amount of assignments and the stress of the exams her senior year (Personal communication with interviewee, June 15, 2019). She states,

"I would get so nervous and anxious that I developed stomach issues. So, it was a lot of pressure" (Personal communication with interviewee, June 15, 2019).

Maria describes her view of learning as a blend of teaching strategies to engage the students at various academic levels. She believes the teacher should make the classroom a positive place with active strategies encouraging engagement. She explains,

"I really didn't like when we would read something in the book and the teacher would just regurgitate that back. So, if I'm gonna read something for an assignment I want it to matter" (Personal communication with interviewee, June 15, 2019).

Maria explains the support groups that were in place in her high school. First, she states how supportive her mother was at home. Next, she shares how the students were all under the

same pressure of taking exams and writing the extended essay. Maria recalls attending study groups with her classmates. She also describes how supportive the teachers were by offering before and after school help and just being open with the students for help at any time (Personal communication with interviewee, June 15, 2019).

When it came to choose a college, Maria shares the strong influence of her youth pastor.

She states,

"I wanted a faith-based education and he directed me to the school. And so, it was the only college that I applied to" (Personal communication with interviewee, June 15, 2019).

Maria contributes the workload she had to complete in high school to helping her transition academically into college (Personal communication with interviewee, Jun3 15, 2019). She explains,

"I went straight into college from high school and I was totally down with all the reading. And I could keep up with it. I could keep up with all the assignments. It was so much reading during my literature classes. So, all my DP classes really prepared me for college. And I was really happy, especially with my college, because they accepted and gave me full credit for my years in DP courses" (Personal communication with interviewee, June 15, 2019).

Maria recalls the pressure of the exams and the extended essay her senior year of high school and feels that helped her with facing midterms and final exams in college (Personal communication with interviewee, June 15, 2019).

### **Takara**

Takara is a sophomore at a small religious college out-of-state from her home. She lives on campus. Takara shares how her family is very close. Takara is very artistic and enjoys creative works of art. When growing up English was not the spoken language in her home. In elementary school, Takara was diagnosed with dyslexia (Personal communication with interviewee, June 22, 2019).

Special classes began for Takara in the second grade. Takara remembers working with reading specialists who taught her skills to deal with her dyslexia. She recalls how the reading specialists also helped her with her English since she was bilingual. Takara shares that in fifth grade, she began going to special GATE classes in addition to working with the reading specialist. She describes her GATE classes as,

"I just had special classes with teachers with lesson plans reflecting on how we learned and how we grew that week. And we did a lot of critical thinking things" (Personal communication with interviewee, June 22, 2019).

By the time Takara reached middle school, she knew she was interested in the medical field. She transitioned into a magnet program that was for accelerated math students. In high school she transitioned into an IB school and her junior and senior year she was part of the Diploma Programme (Personal communication with interviewee, June 22, 2019). Her reasoning for choosing the DP is as follows:

"So, my first two years of high school just wasn't that challenging to me. I needed something to grip my attention a little more. So, the opportunity to apply for DP came up and I did it" (Personal communication with interviewee, June 22, 2019).

Takara describes her DP classrooms as having helpful teachers that presented the content in ways the students could understand. She remembers completing many group projects with her

classmates and timed writing assignments. In some of her classes, she recalls deep class discussions (Personal communication with interviewee, June 22, 2019).

Takara expresses her view of learning as a positive atmosphere in the classroom (Personal communication with interviewee, June 22, 2019). She states:

"I think that it's really important to have an open environment where it's easy to talk to the teacher. And for sure, a teacher that cares about the way the students learn and how they learn the whole learner profile thing" (Personal communication with interviewee, June 22, 2019).

Takara shares her challenge throughout her high school years as her continuing struggle with dyslexia. She explains her struggle with the literature classes, which required a large amount of reading (Personal communication with interviewee, June 22, 2019). She states:

"So, like, my dyslexia is worse when I get stressed. So, it would make it really difficult to learn and understand. And sometimes, I would not understand what the teacher was saying, or I would misread something on a paper and do it wrong. So, I would have to go talk to the teacher and luckily the teachers were really lenient with it. And so, I could redo the assignment because they understood what was happening. That was probably the most difficult part" (Personal communication with interviewee, June 22, 2019).

Takara explains the support she experienced during her high school. She shares how all the teachers were very helpful and students could ask for help before and after school. She describes a tutoring center at her high school "but", she states, "it wasn't very helpful" (Personal communication with interviewee, June 22, 2019). One practice Takara explains as a supportive for her was when the DP teachers taught the students about the learner profiles. To Takara, this opened her view of how she learned (Personal communication with interviewee, June 22, 2019).

Takara chose the college she is attending because she has a desire to be a missionary.

Earlier during her high school years, she babysat for a couple who had served in the mission field. This couple had attended the college she now attends. She states:

"So, I applied at that school so I could focus on my bible school. And I want to be in the mission field. I just want to do it correctly" (Personal communication with interviewee, June 22, 2019).

Takara describes an easy transition to college (Personal communication with interviewee, June 22, 2019). She states:

"It was pretty easy. I am someone who doesn't mind picking up and going somewhere. So, my sister was already at the school my first year. So, my transition wasn't that difficult like socially but when it came to like learning it was a little bit of a switch. They expect so much of you. So, the first couple of weeks were like a learning curve for me" (Personal communication with interviewee, June 22, 2019).

#### Results

The participant interviews comprise most of the data in this research. The writing prompts are secondary, and the focus group is the least amount of collected data that supports the data from the interviews. Throughout studying the data, one hundred and ten codes emerge from the data. Four themes emerge from studying the data and the codes from the data. Each theme consists of sub-themes. The four themes relate to the research questions. The themes are: GATE experience, uniqueness of the Diploma Programme; challenges; and factors for success.

Table 4

Coded Information

Themes	Subthemes	Codes
GATE Experience	Purpose	Pull-out program; Grouping; Identification; Early intervention
	Activities Results	Engaging; Hands-on; Competitive; Student driven; In-depth discussion; Knowledge of being smart; Advanced math; Advanced Reading
Uniqueness of the Diploma Programme	DP Elements	Broad scope across courses; Flexibility; Rigor; Global minded; IB specific language; Learner Profiles; Targets GT students; Not cookie cutter for all students
	DP Teachers	Teacher training; Selectively chosen; Command of classroom; Knowledgeable; Proactive; High investment of their time; Relational; Encouraging; Insightful; Experienced in teaching
	DP Teaching Strategies	Timed writing; Debates; Collaboration; Group projects; Discourse; Socratic seminars; Self-exploration; Research; Critical thinking; Learner Profile Assessments; Reading Strategies
Challenges	In the Classroom	Disengaged teachers; Boredom; Regurgitated information from prior assignment; too many lectures; disengaged classroom activities; Language barriers
	In the Program	IB specific language; Exams cover two years of information; Senior year exams; Extended essay; Workload; High Standards
	Personal	Students knew they were smart; Stressful senior year; Lack of study skills; Procrastination; Lack of motivation to study; Self-Responsibility
	Twice Exceptional	Dyslexia and Gifted; Bilingual; High functioning autism
Success Factors	Classroom Engagement	Relativity to life; Creative; Active; Energetic; Rigor; New information not regurgitated; Higher-level thinking; Explorative; Intrinsic Value; Learner Profiles; Depth of Activities; Hands-on Activities; Positive learning atmosphere; Actively engaged teacher
	Motivation	College credits; Rigorous; Save money; Prestige of program; Supportive teachers
	Support	Peers: Peer tutoring; Study groups; Group texting School: Homework help groups Teachers: One-on-one in classroom; Tutoring; Always available; Helping Personality; Morning Study Groups Guidance Counselors: Academic advice; Scheduling advise IB Coordinators: Support for teachers; support to endure exams; Scheduling of exams Family: Encouragement; Parental Expectations
	College Preparation	Academics: Overprepared; Writing skills; Research skills; Reading skills; College classes=easy Skills: Time management skills; Intrinsic value; Self-responsibility; Independent learner; Academic focus

# **Theme One: GATE Experiences**

All the graduate participants participated in GATE programs beginning in elementary school. All the participants know they differed from the other students. It was participating in these GATE programs that caused them to realize that difference was that they were considered smarter than some of the other students. By the time they reached high school, they were accustomed to advanced-level courses.

**Purpose.** For these participants, they were identified as gifted and talented early and began the pull-out program in elementary school. Levi, Sophie, and Maria began participating in GATE activities in the first grade (Personal communication with interviewee, June 11, 2019; Personal communication with interviewee, June 11, 2019; Personal communication with interviewee, June 15, 2019). Takara was in the second grade when she began special classes (Personal communication with interviewee, June 22, 2019). Carter began elementary school in a private Christian school. He transitioned to the public-school system in fifth grade. It was in the fifth grade when he was placed in the GATE program (Personal communication with interviewee, June 12, 2019).

The graduate participants describe various types of GATE programs. Sophie, Carter and Takara were placed in a pull-out program where they would attend separate classes. However, Maria and Levi had different experiences. Sophie states,

"We would load up on a bus and they would take me to a different school during the day" (Personal communication with interviewee, June 11, 2019).

# Carter shares,

"We were pulled once a week to visit another teacher at another school" (Personal communication with interviewee, June 12, 2019).

Takara describes,

"They put me in different classes. I would go to reading classes for my dyslexia and then different classes for critical thinking" (Personal communication with interviewee, June 22, 2019).

Maria remembers being grouped with other GT students. She states,

"We would break off into groups for reading levels."

She continues,

"Then in fourth and fifth grade I went to a magnet school because they had more advanced classes that would engage me" (Personal communication with interviewee, June 15, 2019).

Levi recalls,

"They had a gifted and talented program that I was in but, really, all that meant was that I had permission to check out different library books than everyone else. I don't really remember it being much more than that" (Personal communication with interviewee, June 11, 2019).

Regardless of the GATE format, these programs were used to identify these students as gifted and talented and served as a predecessor to placement in advanced classes.

**Activities.** The participants who were in active GATE programs reminisce about fond memories in those GATE classrooms. Sophie states,

"They did make it really fun. Like, it was very hands-on."

She continues,

"They would have classes that were different, like astronomy and classes about dinosaurs and stuff like that."

She describes one activity she remembers vividly as,

"I remember in the astronomy class they were teaching about astronauts and how they had to eat out of plastic bags. So, we did this thing in class one day where we put food in plastic bags and then ate it, which sounds really weird. But they wanted us to get the feel of like how astronauts were when they were in space (Personal communication with interviewee, June 11, 2019).

### Maria shares,

"We would run through critical thinking puzzles. We would also build bridges competitively and then we would have, like, prompts and lessons for us to engage in dialogue."

# She continues,

"It was just a lot of puzzles and asking questions, not really leading to an answer but to get us to think critically. We did field trips. One was a bridge building competition" (Personal communication with interviewee, June 15, 2019).

# Takara recalls,

"We did a lot of critical thinking things."

# She continues,

"I just had special classes with teachers with lesson plans, reflecting on how we learned and how we grew that week" (Personal communication with interviewee, June 22, 2019).

### Carter remembers,

"She (the teacher) would show us different things. When I first entered, she was discussing Egypt" (Personal communication with interviewee, June 12, 2019).

In these actively engaging learning atmospheres, the students were growing in knowledge while having fun.

**Results.** The GATE programs the participants were in paved a path in their schooling leading them to advanced courses. By the time the participants were in middle school, they were all placed in advanced classes. These advanced classes led them to be placed in IB magnet programs. From the educators' view according to Scarlett,

"If you're gifted and smart and driven, then you're either going to go AP or DP" (Personal communication with interviewee, June 6, 2019).

Vincent describes the importance of having teachers in the classroom who can challenge GT students. He states,

"I don't think you can throw any teacher a group of gifted and talented students and expect they are going to do as much for their enrichments as a teacher that has the capacity to work with them" (Personal communication with interviewee, June 4, 2019).

The GT participants know they were different because they were attending the GATE classes and then were placed in advanced level courses. Levi states,

"I was just one of those kids that was smart" (Personal communication with interviewee, June 11, 2019).

When speaking of him and his peers, Carter states,

"We just performed at a higher academic level" (Personal communication with interviewee, June 12, 2019).

This identification of giftedness shifts the perspectives of these students into always expecting to participate in higher level courses and programs.

### Theme Two: Uniqueness of the Diploma Programme

The participants share their experience and knowledge of the IB Diploma Programme during their interviews. Every participant shares the unique characteristics of the IBDP. The knowledge varies between the teachers and the graduates. The teachers express an in-depth knowledge of the IB organization regarding the school and the classroom, while the graduates share their knowledge as it pertained to their personal success.

**DP elements.** All participants share the same view that the IBDP is unique and a requires a transition by teachers and students when first entering the program. Vincent shares the uniqueness of the DP brings its own challenges. He says,

"There is a new, a different lexicon of terms, a new language to the IB."

He continues,

"For many folks, that represents a kind of challenge to learn the language of IB."

Vincent explains,

"The focus on the learner profile traits and the focus on global mindedness and this focus on really a broad-based, more liberal education has been really a great one for our students and our school environment" (Personal communication with interviewee, June 4, 2019).

All the participants refer to the IBDP as rigorous but flexible in the path of courses for students. They share how the amount of rigor is an identifying factor of the IBDP. Vincent shares his view of the program as,

"A broad-based education that is well-rounded and rigorous in all areas, so the students have the opportunity for maximum pathways" (Personal communication with interviewee, June 4, 2019).

Rose describes the rigor of the high-level math she teaches by stating,

"A lot of the students I have, have always made A's and they find it really hard suddenly to make an A in this DP course because it is so advanced" (Personal communication with interviewee, May 30, 2019).

For the graduates, they share the uniqueness of the DP. Maria first exclaims, "Well it's pretty rigorous" (Personal communication with interviewee, June 15, 2019). Carter says, "It's a very rigorous program" (Personal communication with interviewee, June 11, 2019). Takara expresses the introduction of the IB language. She describes,

"A lot of teachers would have us take a test at the beginning of the school to see what our learner profile was" (Personal communication with interviewee, June 22, 2019).

**DP Teachers.** All the teacher participants share what an honor they feel it is to be an IBDP teacher. Vincent explains,

"The school has really been selective in who they have selected to be DP teachers. There is an internal interview process for teachers who teach DP. And they are informed of the extra expectations, such as extra trainings they will be required to go to. The school is going to invest in you so, if you get this particular spot, you need to know what is expected of you" (Personal communication with interviewee, June 4, 2019).

Being a DP teacher, like Vincent shares, requires time investment on the teacher's behalf. All the teachers describe numerous trainings they are required to attend. Zaria says,

"We have more trainings that any other teachers at the school." She continued, "We have IB training every year" (Personal communication with interviewee, June 24, 2019).

All the teacher participants are experienced veteran teachers. Angelina has taught a total of thirty-three years (Personal communication with interviewee, May 30, 2019). Rose has also been teaching for over thirty years (Personal communication with interviewee, May 30, 2019).

Scarlet has been teaching for twenty years (Personal communication with interviewee, June 6, 2019). Vincent has been teaching for twelve years (Personal communication with interviewee, June 4, 2019). Zaria has taught for ten years (Personal communication with interviewee, June 24, 2019). The longest period any one of these teachers have taught in the DP is Rose, and she has been a DP teacher for seven years (Personal communication with interviewee, May 30, 2019).

These veteran teachers teach in command of their classroom implementing various teaching strategies and skills every day. Zaria connects with her students. She says,

"Establish a relationship with the students so that you can create an environment of engaged learning and application" (Personal communication with interviewee, June 24, 2019).

Rose sees herself as a guide. She states,

"I provide interesting and engaging activities, but it also is, I would almost say, sixty percent or more their part to take that and run with it and learn. It's all there for them. I guide them through it" (Personal communication with interviewee, May 30, 2019).

Scarlett teaches reaching out to each student. She says,

"I've always believed in teaching with different strategies so I could reach different learning modalities" (Personal communication with interviewee, June 6, 2019).

Vincent focuses on student-led learning. He shares,

"Good education should be modeled. It should be interactive. It should be studentcentered. It should involve a lot of student choice on the ideas and the areas to explore. But it also needs to be set up in ways that are, not only interactive, but that can be competitive. So that, students can compete with their peers" (Personal communication with interviewee, June 4, 2019).

Finally, Angelina shares the uniqueness of each student in each classroom by stating,

"It's not a cookie-cutter. So, you have to learn to do the differentiated instruction in order to reach out to everyone."

She continues,

"You have all these children in the classroom, and they all learn differently. Patience has to be there. You have to learn how to reach" (Personal communication with interviewee, May 30, 2019).

**DP Teaching Strategies.** All the participants share the importance of engaged classroom activities in the DP classroom. All of them share that collaboration and timed writing is a focus in the classroom. Sophie states,

"We usually did projects in groups."

She continues,

"We had timed writing assignments" (Personal communication with interviewee, June 11, 2019).

Carter shares,

"We did group projects and group presentations. They were really heavy on collaborative work. I would have preferred independent but, there was a lot of collaborative work. I do remember that" (Personal communication with interviewee, June 12, 2019).

Maria recalls,

"It was all reading and writing. We also had Socratic seminars" (Personal

communication with interviewee, June 15, 2019).

Levi shares,

"It wasn't that different from a regular class, with the exception of the writing that we practiced and learning how to read documents. We learned how to write an essay from the information we learned from the documents" (Personal communication with interviewee, June 11, 2019).

The teacher participants shared different aspects of the various IBDP teaching strategies. Scarlett expresses her enjoyment of teaching a DP course by stating,

"I could elaborate on things and kind a build more in-depth knowledge for them" (Personal communication with interviewee, June 6, 2019).

Vincent shares,

"I would say the biggest things I noticed in IB classrooms is the level of discourse."

About the IBDP teaching strategies he continues,

"There is really a focus on alternative assessment and creative displays. you see in different classrooms from sciences to the arts It really reveals a focus on students producing work that is thoughtful and meaningful" (Personal communication with interviewee, June 4, 2019).

# **Theme Three: Challenges**

All the participants share challenges they faced as being part of the DP program. Some of these challenges were endured, while others were overcome. Some of the participants share that they felt dealing with the challenges they faced made them a better person. In reflection, the graduate participants view their challenges as helpful for their preparation for college and adulthood.

**In the classroom.** The participants share various challenges they faced in their DP classrooms. As a teacher, Scarlett sets high standards for her students. When asked what she observed as the students' biggest challenge, she states,

"My expectations" (Personal communication with interviewee, June 6, 2019).

The graduate participants describe feeling pressure from high expectations in the classroom. Maria shares,

"Well they are pretty rigorous. So, keeping up with the amount of work was the challenge" (Personal communication with interviewee, June 15, 2019).

Sometimes the teacher in the classroom was viewed as the challenge to the students. Levi shares his experience by stating,

"My math teachers were from another country and had strong accents. And they didn't understand English on the same level as an American teacher. So, that made it very difficult for me as a student to learn" (Personal communication with interviewee, June 11, 2019).

In classrooms like the one Levi describes engaging in the content is difficult. Carter describes a class as, "really boring." He states,

"That teacher preferred to teach from power points and give lots of quizzes."

He continues,

"He would have us doing quizzes on content that was not presented to us before. And then the power point would be about the stuff that was on the quiz. So, it was not all that helpful" (Personal communication with interviewee, June 12, 2019).

Maria expresses her frustration by stating,

"I really didn't like when we would read something in the book and the teacher would

just regurgitate that back" (Personal communication with interviewee, June 15, 2019). Sophie expresses her challenge as,

"One of my teachers was very, like, kind of uptight. And it made the class feel, like, stressful and made you feel like, I'm doing stuff wrong and am I gonna fail, which I wasn't because it was just one little thing" (Personal communication with interviewee, June 11, 2019).

In the program. The IBDP has unique characteristics in its structure and expectations. As being part of the program, the participants experience challenges based on those unique characteristics. Not only were the classes rigorous with high expectations, the DP has specific guidelines that the participants had to follow.

From a teacher perspective, Vincent shares the struggles he observed the students enduring. He states,

"I think so many of the aspects of the IB model run contrary to that where the focus is not on the grades, in the traditional sense. So, I think that for the kids, both the personal project the extended essay, those parts have been difficult for them."

He continues,

"It's been very hard for a lot of our kids to wrap their heads around and adjust to and this new way of thinking about progress as a learner, their growth and development as a global citizen. That's been one of the harder things for our students to really get through."

Vincent also shares his concern about the students learning the IB verbiage. He states,

"I think that has been hardest learning curve, is just remembering to call things the right

the right thing. And then sometimes, I think. If the we are confused about that as educators, then what about our students" (Personal communication with interviewee, June 4, 2019)?

Sophie and Maria share the feeling of being challenged by the exams their senior year.

Sophie recalls, "They were very stressful." She continues,

"We learned about something at the beginning of the year and you had to remember that at the end of the next year. Because, it built on. So, once the time for exams rolled around, I would have to remember what I learned so much earlier. So, I had to remember everything I needed to know" (Personal communication with interviewee, June 11, 2019). Maria's experience was stressful too. She states,

"The stress of the exams, I would get so nervous and anxious that I developed stomach issues. So, it was a lot of pressure" (Personal communication with interviewee, June 15, 2019).

**Personal.** Levi and Carter share challenges on a personal level. They share that they did not have strong study skills. Levi comments,

"I'm one of those students still that doesn't need to study. So, I'm kind of smart enough to scrape by" (Personal communication with interviewee, June 11, 2019).

Carter expresses that some of his challenges stemmed from within. When asked what was the most challenging to him, he states,

"Probably time management. I am a procrastinator at heart."

He continues,

"Occasionally I would feel angry. Like, I wasn't given enough information. Like, the

cards were stacked against me, feeling like I just wasn't given enough. Of course, I look back now and see I was given enough. I just didn't apply it in the right way" (Personal communication with interviewee, June 12, 2019).

From the teacher's perspective, sometimes it's a challenge for GT students to grow and learn in the classroom. Scarlett recalls a GT student in her classroom. She shares,

"He was very much engaged in everything we did and contributed to improving writing for the students around him. So, while he was completely engaged, I am not sure that he learned anything new from what I was teaching, because I think he already knew it" (Personal communication with interviewee, June 6, 2019).

Once again, Vincent turns to the IB characteristics in the classroom. He states, "I think we have built a structure in education that has transcended where, again, kids are performing work for this amount of points. And for kids who are compliant they got A's because they got all of their work done and their work is quality enough that they earn As. Now, we are saying no, no, no. It's really more about your mastery of skill. It's more about the journey and the reflection on your growth as a learner. That it's been very hard for a lot of our kids to wrap their heads around and adjust to. And this new way of thinking about progress as a learner, their growth and development as a global citizen, that's been one of the harder things for our students to really get through" (Personal communication with interviewee, June 4, 2019).

Angelina also shares the challenge of the DP mindset in the classroom by what she tells her students. She states,

"If you are coming into this course to memorize, oh my gosh, I feel for you. It's trying to

make connections: why did this happen, why does it happen at this time, and maybe, why does it repeat, and why is there something similar at that time period" (Personal communication with interviewee, May 30, 2019).

**Twice exceptional.** Two of the participants either experienced or observed the challenge of being twice exceptional. Takara's personal challenges are very different from the other graduate participants. First, she shares,

"Growing up, there wasn't much English spoken in my house. So, I was sort of bilingual so that made English sort of hard form me" (Personal communication with interviewee, June 22, 2019).

Next, Takara shares her battle with dyslexia and how she deals with challenges related to that during her years in the DP. She shares,

"So, like, my dyslexia is worse when I get stressed. So, it would make it really difficult to learn and understand. And sometimes I would not understand what the teacher was saying, or I would misread something on a paper and do it wrong. So, I would have to go talk to the teacher. And luckily, the teachers were really lenient with it. And so, I could redo the assignment because they understood what was happening" (Personal communication with interviewee, June 22, 2019).

Rose describes her observations of twice exceptional students in her higher math classes. She shares,

"I have actually had students who are high functioning autistic students and they do amazing" (Personal communication with interviewee, May 30, 2019)!

No matter what challenges arise, GT students work through them. Teachers are there to help them along the way to success.

### **Theme Four: Factors of Success**

The final theme arising from all the participants is factors that contributed to their success, whether as a teacher or a graduate. The teachers focus on helping their students succeed. This focus is evidenced through the shared experiences of the graduates. The two biggest success factors are: support systems and engaging classroom activities. Following those factors are motivation and being prepared for college.

**Engaged classroom.** The classroom is the heart of the DP. The participants share how the classroom atmosphere encourages their personal investment into the content and activities. Maria focuses on the teacher setting the tone in the classroom. She states:

"I felt like all the classes I took were really well put together and the teachers really knew what they were talking about" (Personal communication with interviewee, June 15, 2019).

From the teacher perspective, Vincent supports Maria's view of the classroom. He states, "In the theory of knowledge class, I facilitate discussion with the students about all kinds of topics like, what constitutes art and how is it valued and things like that. The level I think of rigor, in regards discourse and discussions. Also, too, one thing I notice about the IB classroom is the kind of projects and performances. There is really a focus on alternative assessment and creative displays" (Personal communication with interviewee, June 4, 2019).

With all the participants, the teacher is the focus of the amount of engagement experienced in the classroom.

The participants share how they enjoyed active teachers in the classroom. Takara states: "We had a lot of one on one with the teacher we had time for the teacher to explain

things."

She continues,

"I think that it's really important to have an open environment where it's easy to talk to the teacher. And, for sure, a teacher that cares about the way the students learn and how they learn the whole learner profile thing. I never thought about before. So, I think finding out how students learn, to know how they understand, I think it's really important to do that." (Personal communication with interviewee, June 22, 2019).

Along with Takara, Levi shares how he connected with active, higher-level thinking classrooms. He states:

"The classes I had the most fun in were the classes where I learned a lot." He continues,

"The literature classes, I enjoyed them very much. I really like the DP stuff of discussing what we were reading and writing more. I love writing. So, that was really a highlight of my school, was DP literature."

He recalls,

"In lit, we watched a lot of criminal minds. And we talked about the episodes. And we were able to analyze and predict things in literature a lot better after that" (Personal communication with interviewee, June 11, 2019).

Both participants were encouraged to work hard because they saw their teacher working hard with them.

Creativity in the classroom is also a common sub-them the participants share. As a teacher, Angelina describes an activity that is a favorite with the students every year. She shares,

"They did a presentation on a pre-Columbian dinner. They had to identify these

significant men and explore who are you sitting them by, what is the people's conversation, and what is it that you are going to serve as a meal. And I said, 'Now keep in mind that they didn't eat what we eat today.' So that was interesting. It was really nice. They put together an invitation. One had like a scrolled paper. Someone had a simple pound cake for dessert, and they brought that to share" (Personal communication with interviewee, May 30, 2019).

As a student, Sophie shares a small way her teacher exhibited creativity in the classroom that helped her engaged in the content. She shares,

"In my higher-level math class, we usually did projects in groups. So, like, one time we used M&Ms to figure out math equations" (Personal communication with interviewee, June 11, 2019).

# Sophie admits,

"Advanced math scared me but turned out to be beneficial with a fun engaging teacher" (Personal communication with focus group, June 24, 2019).

These examples of creativity in the classroom, engage the students and bring them to a place of ownership of their learning.

Some of the participants shares that their engagement comes from and intrinsic value placed on the activities in the classroom. As a teacher, Zaria states,

"I try to pull the relativity out immediately and at the same time, I make sure it's challenging them" (Personal communication with interviewee, June 24, 2019).

Making the content relevant to the students' lives places an intrinsic value upon the learning. Sophie expresses this concept by stating,

"We could take what we learned and actually use it and see how its relevant and why it's

needed. Like, I don't want to just sit here and learn about it. I want to know why I need to learn it and, like, why it is useful" (Personal communication with interviewee, June 11, 2019).

Carter exemplifies this intrinsic ownership of learning. He states,

"In math, the teacher would send us home will a ton of work. He wanted us to work on our own. So, he would send the work home and then, the next day we would come together and discuss how we did the work. And I really liked that. Because I could work until I hit a wall. And say, 'Hey teacher I need some help here. What's going on?' And he would explain it to me. He would give us a topic, like general equations and give us a worksheet, and say, 'Go.' So, if everyone was having problems, then he would stop us and write some examples on the board and show us how to manipulate it until we could work it' (Personal communication with interviewee, June 12, 2019).

Carter shares his view of the how the best atmosphere in the classroom is created. He states, "I think that it should be a perfect mix between a teacher giving you information and staying on top of you at the same time, while allowing the student to explore and learn on their own" (Personal communication with interviewee, June 12, 2019).

These participants present information in a way that could become intrinsically motivated and share the experienced intrinsic motivation which created an engaged environment in the classroom.

**Support system.** All the participants share support systems that were in place throughout their experience. These support systems include their peers, programs in the school, the teachers, guidance counselors, IB coordinators, and family. The students in the DP know they are not alone and have many resources to go to for help or questions.

*Peers.* The graduate participants remember how helpful their classmates were during high school. Maria recalls,

"So, in the DP program, everyone is there doing the same thing. So, I wasn't alone. So, we had study groups. And if I was struggling with something, I could always ask my classmates" (Personal communication with interviewee, June 15, 2019).

Carter shares a unique way his peers supported each other. He shares,

"One thing I remember helping out was in my first DP class, which was history.

Someone in the class started a massive group text conversation. And it was about 50-60 students involved in that group. And if anyone had a question, they would post it to the group. And one of the star students would, rather quickly, respond. It was just nice to see students working together on that one" (Personal communication with interviewee, June 12, 2019).

Takara shares how group projects encourage help from peers. She stated,

"My peers would help me with doing stuff too. Like, we had lots of group projects and we all had our responsibilities. And we knew what we had to do" (Personal communication with interviewee, June 22, 2019).

School Programs. In some cases, the schools provide support programs for the students. Sophie remembers,

"We had a program where we had after school, kind of like remediation, but a little different like a homework help time" (Personal communication with interviewee, June 11, 2019).

Takara shares about the program offered by her school. She states,

"We also had a tutoring center, but it wasn't very helpful" (Personal communication with

interviewee, June 22, 2019).

*Teachers*. The largest amount of support expressed by the participants is through the teachers. All the participants share that the teachers were available to help students. Carter states,

"Teachers, as always, made themselves available. They answered emails. They answered twitter DMs (direct messages). In some cases, they made themselves available before school or after school via electronic communications" (Personal communication with interviewee, June 12, 2019).

Levi and Sophie both recall tutoring offered by the teachers. Levi shares,

"Most of my teachers offered after school tutoring. And I never attended a single one throughout high school. And now I wish I had honestly" (Personal communication with interviewee, June 11, 2019).

## Sophie states,

"Well, a lot of the teachers did, like, remediation. I had to go to some of them. So, like, they would have remediation before, like, home base in the morning. I would go there or after school we could go and get help" (Personal communication with interviewee, June 11, 2019).

#### Maria shares,

"So, I had one teacher, he had morning study group once a week. And yeah, he had donuts and coffee. So, that was good we went to that" (Personal communication with focus group member, June 24, 2019).

Takara shares how helpful her teachers were. She states,

"We had a lot of one on one with the teacher."

She continues,

"The teachers had after school hours that you could come in and get help. So, the teachers were really helpful, and they made it easy for us to ask questions. And it was easy for us to talk to them" (Personal communication with interviewee, June 22, 2019).

Other support. Some of the participants share other support factors such as the IB coordinator at the school and family. These final support factors build upon the support received by the teachers and the classmates. The participants express a strong support system to help them persevere through graduation.

Zaria and Scarlett both share the influence of the IB coordinator at the school. Zaria states,

"We have an IB coordinator who is an expert with the program" (Personal communication with interviewee, June 24, 2019).

Scarlett shares,

"One thing I thought was done really well, and I don't know if other schools do this, but our coordinator made sure that there were no other IAs going on at the same time. So, the students aren't working on their history IA and their math and science IA at the same time. We have a calendar of when it happens within their two years. So, they can plan and not be overwhelmed at the same time. I find that to be very useful in that respect" (Personal communication with interviewee, June 6, 2019).

Maria and Levi share a strong family influence during their high school years. When asked about supportive factors, Maria states,

"My parents, my mom really, she knew how smart I was. So, she always encouraged me" (Personal communication with interviewee, June 15, 2019).

Levi shares,

"My parents have high expectations for me and that set the tone" (Personal communication with interviewee, June 11, 2019).

The participants express a strong sense of support during their high school. These supports help them through some stressful and challenging circumstances.

**Motivation.** All the graduate participants express how there were motivating factors of the IBDP pushing them toward successfully receiving an IB diploma. These motivational factors are aspects of the DP program that the students made an intrinsic connection with for motivation. The overarching motivator is the prestige and rigor of the program. These GT students know they needed a program that would push them and keep them interested in the classes.

The graduate participants had been placed in the IB magnet program. Several of them chose the IB program because of its reputation as a rigorous program. Maria states,

"I was in the magnet program. So, I just followed the IB magnet program. And applying to DP was just the next step in the IB magnet program" (Personal communication with interviewee, June 15, 2019).

Takara shares,

"I needed something to grip my attention a little more. So, the opportunity to apply for DP came up and I did it" (Personal communication with interviewee, June 22, 2019). Levi recalls,

"I was already predetermined to take rigorous courses in high school. And so, while I was able to meet with the counselor, it was suggested to transition to apply for the DP program" (Personal communication with interviewee, June 11, 2019).

Another motivator is the money the program would save them through receiving credits from college for their DP courses. Carter shares money as being his main motivator. When asked why he made DP his choice he replies,

"Money, most importantly money, I am paying out-of-pocket, so it was important for me" (Personal communication with interviewee, June 12, 2019).

Sophie also admits the possibility of college credit from the courses were a motivator for her. She states,

"I applied to the DP to help me get into college. And I wanted an advanced diploma, so the DP gives you college credit. So that's why" (Personal communication with interviewee, June 11, 2019).

As a teacher, Zaria shares the motivator of possible college credits with students who come to talk with her when they are considering applying to the DP. She shares,

"In the program they graduate high school with a years' worth of college credit. It's extremely beneficial for those who want to do the work" (Personal communication with interviewee, June 24, 2019).

These motivational factors not only help the students decide to apply to the IBDP, but also to strive to finish successfully by earning an IB diploma.

**College preparation.** All the graduate participants share that they feel they well prepared for college. Each of them remembers a smooth transition to college. From their experience in the DP, they entered college with confidence.

The graduate participants are eager to share their story of transitioning to college. Levi states,

"College has been a breeze for me but, I do take it seriously" (Personal communication

with interviewee, June 11, 2019),

When asked to describe her transition to college, Takara shares,

"It was pretty easy."

She continues,

"So, the first couple of weeks were like a learning curve for me. So, it took me a couple of weeks to integrate in the college learning culture (Personal communication with interviewee, June 22, 2019).

Sophie shares her confidence is rooted in knowing the DP helped her with college credits. She states.

"I wasn't nervous about starting classes because I didn't have to take many of my core Classes. So, I wasn't nervous" (Personal communication with interviewee, June 11, 2019).

Carter expresses how he feels college is easier than high school. He shares,

"I was extendedly prepared. College courses are absolutely nothing compared to the rigor I experienced in the DP courses. I think the different teaching styles, like my math teacher and the lit teachers, shaped me and helped give me a view of what I was going to encounter. It's really not a big deal. I feel like they overprepared me and I just feel really good about it" (Personal communication with interviewee, June 12, 2019).

From a teacher's perspective, Angelina shares her experience by stating,

"Well, from what I have seen and what I have heard, and this came from two of my students that came back, and they were very honest. They said, 'Now I understand why. Why you were so hard. Why you expected us to read. Why you made me write so much. Because now I get it, you know. Why you were asking me to be so organized within

their binder.' So, they have a binder and they keep it organized according to the chapter activities. 'Now, I get it. Now, I understand because it has helped me to be more successful and to take it at ease this first semester of college'" (Personal communication with interviewee, May 30, 2019).

As Angelina points out, the DP prepares students for college in many ways other than teaching them subject content in the classroom.

The participants share how the DP classroom activities help with their transition to college. When asked what about the DP prepared her for college, Maria states,

"I think just the workload, totally. I went straight into college from high school and I was totally down with all the reading. And I could keep up with it. I could keep up with all the assignments. It was so much reading during my lit classes. So, all my DP classes really prepared me for college. And I was really happy, especially with my college, because they accepted and gave me full credit for my years in DP courses"

She continues,

"I felt like I could deal with the pressure of midterms and finals because I had endured all the IAs and took all the exams and extended essay my senior year. So, that senior year was so much pressure it was really stressful (Personal communication with interviewee, June 15, 2019).

Takara shares in the view of the high standards of the DP helping with her college preparation. She explains,

"So, they had high standards for us, and they required us to have a higher level of knowledge. And I think that really helped when it came to going into college. Because it really pushed me to think about, ok, this is what they are expecting. So, them pushing us

to understand and do the work at a college level really helped" (Personal communication with interviewee, June 22, 2019).

Sophie shares skills she learned in high school by stating,

"I, like, know how to write, like, how to listen for what the professor wants. So, I write the assignment like he wants it. I feel like without my DP experience, it would have been a lot harder. So, I had already learned how to write and create power points" (Personal communication with interviewee, June 11, 2019).

Levi contributes his success to a combination of the DP and the STEM extracurricular program he was involved with in high school. He shares,

"Between DP and the STEM program that I was in, I learned how to work hard. So, a 30 slide PowerPoint, I can make it in 30 minutes. So, I think it was the higher expectations of the DP and STEM program that just slowly transitioned me into a higher-level of difficulty and made us better students with that" (Personal communication with interviewee, June 11, 2019).

The teacher participants are conscientious of the skills they are teaching their students.

They realize they are preparing these students for the future. Rose admits the rigor in her class is the students' college preparation. She states,

"Well I think it's probably harder than some of the things they are going to do in college."

She continues,

"they have to be accountable. They have to be prepared. I think we teach them to be extremely organized" (Personal communication with interviewee, May 30, 2019).

When asked what aspect of her DP classroom prepares her students for college, Scarlett replies,

"The research for sure. The IA for allowing things to support for students. So, in my AP class, I don't have a lot of time to teach them to do proper research. Because, I need them to know these things and write this way so they can pass the test and not have to take it in college. But I feel like they are missing that research component and how to cite properly. So, that is one thing I think is very beneficial. Any advanced-level course is going to prepare a student for college because of the time management and as long as they are taking multiple classes. So, in DP it's all or nothing. When you're in DP, you're in all classes. You don't get to pick and choose which advanced class you want" (Personal communication with interviewee, June 6, 2019).

Vincent goes in depth in sharing how not only he prepares his students but the IBDP prepares them as a whole. He shares,

"I think one of the biggest is that, I think, the Diploma Program is a liberal art

Education. It's one that requires a wide variety of subject areas, but they have a choice
on different levels on things they can do."

## He continues,

"I think the emphasis on communication, on discourse, on literacy, I think the speaking, listening, and writing component is huge for the IB. It prepares students in ways that I don't think a non-IB education would come close because of these extended opportunities for productive rich discourse."

He continues to share the intrinsic value placed within the student by stating,

"I think that is really a big part of what is going to support their readiness for college is

just building that incredible skill of how do you engage in academic discourse at a high level using disciplinary literacy. And what I mean by that is: how do think about science like a scientist; how do you talk about math like a mathematician. It's like the students aren't just learning about a subject from the outside. They are learning about subjects from the inside and adopting that language of an actual practitioner in that particular skill. And I think that's a big part of what I see in terms of kids coming through. It's like in global politics, and they are doing MUN (Model United Nations). They are not learning about politics from a student perspective. They are actually learning the language of politics as a politician, as an ambassador, as a delegate. So, they are learning to speak the language of diplomacy not speaking about it like it's a subject that is off in the distance."

"There is a sort of place where they take ownership and commitment. And I think that holds true in every subject within the IB framework in the DP. I think that is what kids are getting. And I think that is preparing them for college. And they are used to living it, not just studying it but actually owning it" (Personal communication with interviewee, June 4, 2019).

The idea of owning their education, Vincent voices, is exuded through the shared experience of each of the graduate participants.

#### **Theme Five: Words of Advice**

Each of the participants were asked to share their advice to a hypothetical person in high school considering being a part of the IBDP. The following are participant submissions:

### Teachers.

He concludes,

Dear Student,

When you enter the Diploma programme get ready to work. Your time in the classes ahead of you are going to challenge you to become a better student than you are now. Don't think you will ride through this easy breezy. You must keep up with your assignments. You must get used to time writing assignments. And you must be willing to collaborate with the other students in your class.

Best wishes,

Angelina

Dear Future DP Student,

The decision to be a part of the IB Diploma Programme will change your life. This program will enhance your education bringing growth into your life. Throughout your final years in high school, you will learn to be a global minded citizen and collaborate with your peers. This will be a wonderful opportunity for you to earn college credit while in high school. If you are part of the Model United Nations, you are going to love the Global Politics class! Upon completion of high school, you will certainly be a well-rounded student, fully prepared for college.

My best regards,

Vincent

Dear Sophomore Applicant,

The Diploma Programme is the way to go. Make sure you bring you're A game to the classroom. You will get out of the classes what you put in. The DP teachers all want to help make you successful in receiving you IB diploma. Be prepared to discuss, debate, and work together with your classmates. You have to work but you are not in this alone. Your teachers and peers are behind you 100%. You can do this!

Let's do this!

Scarlett

Dear Student,

First, don't get overwhelmed by the expectation but allow your expectation of yourself to overwhelm it. Because students have a tendency to immediately look at how long and how hard something is going to be, it automatically gives them a perception of what if I don't. I would like to reiterate what if you do! This is a type of program that is not based on intellect it is based on effort. The only thing that separates you from other students is your intrinsic motivation to want to do more, to want to achieve more, to want to be more. When you have that type of motivation intrinsically, that is the type of motivation that builds the who knows versus the people who no one knows. These are the people that decided, you know what, I'm going to do this and I'm going to do it so much better than anyone else that people are going to have to know who I am. Don't allow the difficulty of something to be the finalizing reason why you don't. Let it be the reason why you do. Because when you do something that is too hard for you and you actually accomplish it, the level of gratification that you experience is incomparable to anything else that you will experience in your life. Because you didn't just prove it to somebody else, you just proved it to yourself and that is the most important person you need to prove it to. Because once you prove something to yourself, then other people don't matter. And when the other people applaud you, then you can thank them, knowing that within yourself you already knew you could do it.

Great Expectations,

Zaria

#### Graduates.

Dear Sophomore,

If you are considering entering the DP, you really need to take it seriously. Like, I am telling you it is not like taking classes where you sit and do nothing. You will have to put in the work, and you will have to want to succeed in it. You will have to believe that you will get through it. Because it will affect your transcript. If you enter the DP and mess it up, you will really regret it. So, my advice to you is to take it seriously. Don't just be in there because your friends are in there. You have to want to be a DP student!

Sincerely,

Sophie

Hey Sophomore,

I advise you to make yourself a schedule and stick to it no matter what. Studying is always going to be something that is important. It will be what makes the difference in the B you make just by listening in class and the A you could get by putting in some outside time, just enough to make that difference.

Carter

Dear Applicant,

So, you are applying to the Diploma Program, well I have some advice for you. First, make sure you take classes that interest you for your arts and electives. There are many classes where you don't have a choice so make sure you really like the ones you get to choose. Otherwise the heavy classes will bog you down. And you need to prepare properly to score well on your class assessments, exams and extended essay.

Best of Luck,

Maria

Dear Student,

The diploma program is beneficial. It helps you grow in your knowledge but not only in your knowledge but in your maturity. It's beneficial to help you grow. Expect something different in each class. Each teacher is going to be teaching differently. So be ready to be mature about it and do the work as they assign it. Also remember to for self-care. I think that it's important to be a DP student because it challenges you in a way that you didn't think that was possible but that are beneficial. I think a lot of time the public-school system doesn't do justice to learning in standard classes and so you're not learning at a rate that is always beneficial to you. And sometimes it's too easy and sometimes, at least in my case, it wasn't challenging enough. So, you need to be able to challenge yourself.

Good luck,

Takara

## **Research Question Responses**

Four research questions guide this study. Many of the emerging themes are directly related to the research questions. A discussion of the study's four research questions is provided.

**Research Question 1.** How do both educators and gifted and talented graduates describe their experiences in International Baccalaureate Diploma Programmes in the Southeast United States?

To answer RQ1, question number 1 from the personal participant interviews, question number 1 of the focus group and the visual representation from the focus group is used. The

participants' personal experiences in the IBDP reveals Theme Two: Uniqueness of the Diploma Programme and Theme Three: Challenges. These shared experiences are all based upon the uniqueness, reputation and rigor of the IBDP.

*Educators.* The experience of the teachers focuses upon the amount of training required to be a DP teacher. The educator participants equally share how they are dedicated to the long-term investment in the IBDP and its teacher requirements. Their commitment is based upon the fulfilling reward they receive through making a difference in the lives of their students.

Overall the IBDP teachers enjoy teaching in the DP. Angelina states,

"It's a lot of work. If it were my choice again, I would probably say yes" (Persona I communication with interviewee, May 30, 2019a).

Rose shares, "I enjoy it" (Personal communication with interviewee, May 30, 2019b). Vincent describes teaching in the DP as,

"An invigorating experience for everyone, not just the teachers but for the students" (Personal communication with interviewee, June 4, 2019).

Scarlett explains,

"I was very excited about teaching DP because it offered kind of a different course for me to teach, while at the same time I got to pick the topics that we were covering. And so, I really felt good about the content I was teaching. And how I could elaborate on things.

And kind a build more in depth knowledge for them" (Personal communication with interviewee, June 6, 2019).

These participants have all overcome frustrations but still find teaching as a DP teacher unique and rewarding.

One focus of the DP the teacher participants experience is IB specific training. Rose shares,

"Well, you have to go to training seminars to learn the right verbiage. What to tell the kids. Exactly what to say" (Personal communication with interviewee, May 30, 2019b).

Vincent shares about the amount of training he and other teachers are required to attend at his school. He highlights why this is such a strong focus. He states,

"You know I think for most of us there is a new a different lexicon of terms a new language to the IB."

### He continues,

"So, I would say the training we have received by the IB, both here in the district and in the state, these have been really, really, significant for us as part of our journey. I can't imagine running the program we have in place without those trainings" (Personal communication with interviewee, June 4, 2019).

### Zaria shares,

"We have more trainings than any other teachers at the school. We have IB training every year" (Personal communication with interviewee, June 24, 2019).

Scarlett feels like she needs more ongoing training as a DP teacher. She states,

"I feel like I need more training."

#### She continues,

"So, I would personally like more training. I feel like I have all the resources I need or that are available to facilitate it. But I feel like I need help with more strategies and what IB is looking for when they are scoring" (Personal communication with interviewee, June 6, 2019).

These teachers express their desire to be the best they can be in their classrooms and to their students. Both Rose and Scarlett describe the investment of time they have to put into being a DP teacher. Rose states,

"It's very time consuming" (Personal communication with interviewee, May 30, 3019b).

Scarlett shares,

"It's like me and two other teachers who actually taught all of the DP students. And so, we felt like there were some things we could help each other with. But we found out, more often than not, that we just didn't have the time to" (Personal communication with interviewee, June 6, 2019).

Since the DP teachers have high expectations placed upon them, the participants express the amount of comradery they experience with the other teachers. Rose shares,

"So then, we work as a team, the teachers do, to constantly be monitoring each other and talking to each other" (Personal communication with interviewee, May 30, 2019b).

Angelina describes how she gets advice from her colleagues. She states,

"Within a department, I get help from the other teachers...Hey, how do you do this? Hey, I don't understand this" (Personal communication with interviewee, May 30, 3019a).

Scarlett shares how her colleagues supported her at a time when she felt overwhelmed. She recalls,

"So, I did their history IA and I was freaking out. First of all, I was like, I don't feel comfortable scoring these. I mean, I wanted more training to score them. I didn't feel the best teaching it. I kind of figured it out. And then ultimately, I talked to somebody who taught at a different school who gave me some ideas. And then, I ended up using my

department teachers to help me score it" (Personal communication with interviewee, June 6, 2019).

Through it all, Vincent shares,

"I think it has been a journey but overall our school is a better place for it" (Personal communication with interviewee, June 4, 2019).

*Graduates*. The graduate participants all share how they chose the IBDP based upon its reputation as a rigorous program. Maria explains how she was already in the magnet cohort. When asked why she chose the DP she states,

"Some of it wasn't my choice. I was in the magnet program so I just followed the IB magnet program and applying to DP was just the next step in the IB magnet program" (Personal communication with interviewee, June 15, 2019).

Carter and Levi both followed the expectations of their parents. Levi states,

"My parents sort of expected me to."

### He continues,

"I was already predetermined to take rigorous courses in high school. And so, while I was able to meet with the counselor it was suggested to transition to apply for the DP program. (Personal communication with interviewee, June 11, 2019a).

#### Carter shares,

"I had push from my parents. They encouraged me to push myself" (Personal communication with interviewee, June 12, 2019).

Takara shares,

"I needed something to grip my attention a little more. So, the opportunity to apply for DP came up and I did it" (Personal communication with interviewee, June 22, 2019).

Sophie explains her interest in the possible college credits she could earn. She states, "I applied to the DP to help me get into college and I wanted an advanced diploma. So, the DP gives you college credit. So that's why" (Personal communication with interviewee, June 11, 2019b).

These participants know they were entering a rigorous program but they were expecting the benefits that are attached to earning an IB diploma.

By far the graduates reflect on the teachers they had in the classroom when sharing their experience in the DP. Sophie expresses her experience clearly. She shares,

"It was kind of like a hit or miss with teachers. Some teachers were, like, easy going and it made the class like relaxing. But another one of my teachers was very, like, kind of uptight. And it made the class feel, like, stressful."

She continues,

"It depends on the teacher how, like, I felt in the class, if that makes sense" (Personal communication with interviewee, June 11, 2019b).

The participants share specific stories of a good and bad situation they experienced with teachers. Maria shares her overall viewpoint of the program by stating,

"I felt like all the classes I took were really well put together and the teachers really knew what they were talking about" (Personal communication with interviewee, June 15, 2019).

Takara recalls the helpfulness from her teachers. She shares

"We had a lot of one on one with the teacher. We had time for the teacher to explain things."

She continues,

"The teachers tried to help as much as they could" (Personal communication with interviewee, June 22, 2019).

Carter describes his best teachers. He states,

"My history teacher and my math teacher were a kind of learn this on your own but at the same time putting it up on the board and saying look this is how this works and just sort of helping guide the student. Not just teaching them and not just letting them go and see how they do and picking up the pieces afterwards" (Personal communication with interviewee, June 12, 2019).

Levi and Maria share bad experiences with their higher-level math teachers. Levi shares, "Then, in 11<sup>th</sup> and 12<sup>th</sup> grade the math, I could really tell the difference. The higher-level maths were not noticeably harder they were just the next math that was coming. And to be honest, I didn't have great teachers for those classes. And so that affected my perspective on math in general."

### He continues,

"So, throughout my DP years, my math teachers were from another country and had strong accents and they didn't understand English on the same level as an American teacher. So, that made it very difficult for me as a student to learn" (Personal communication with interviewee, June 11, 2019a).

Maria shares her math experience by recalling,

"The first week to two weeks of teaching, the original teacher kind of had a mental breakdown and he quit. And someone else took over the class. And the new teacher, it didn't seem like she knew what she was doing. And it was her first time teaching this

level of math. So, that class was like I was teaching myself everything" (Personal communication with interviewee, June 15, 2019).

These participants exude their investment in the DP along with understanding the investment of the teachers. All but Levi reflect on the rigor of the courses. Levi contradicts the others by stating,

"It wasn't that different from a regular class" (Personal communication with interviewee, June 11, 2019a).

**Research Question 2.** What characteristics of classroom practices do educators and gifted and talented graduates identify as influential to the graduates' academic persistence in International Baccalaureate Diploma programs?

The participants all share classroom practices they feel were engaging, which are helpful for students to become successful in the class. The participants' engagement in the classroom is evident in their shared experience and forms parts of Theme Two: Uniqueness of the Diploma Programme and Theme Four: Factors for Success. The engaging activity involves a high level of student involvement and discussion, making the activity meaningful to the students. The classroom activities that connect the students with the content in the classrooms involves communication, collaboration, creative activities and independent work.

Communication. Communication (written and verbal) is the most common classroom activity my participants either implement or participate in during their DP courses. Angelina, Scarlett, Zaria and Vincent discuss how they implement writing activities in their classrooms. Many of these writing activities are timed to get the students to feel comfortable with expressing their thoughts in written format (Personal communication with interviewee, May 30, 2019a: Personal communication with interviewee, May 30, 2019b: Personal communication with

interviewee, June 4, 2019: Personal communication with interviewee, June 6, 2019: Personal communication with interviewee, June 24, 2019).

Zaria shares how she has her students write so much throughout the school year that, "By the end of the year they are so used to it. And I can literally, I can read a student's paper and know whose it is without them having written their name on it" (Personal communication with interviewee, June 24, 2019).

The communication in these teachers' classrooms is not only in written format. These teachers conduct in-depth discussions with their students, building verbal communication skills. Vincent shares,

"I would say the biggest things I noticed in IB classrooms is the level of discourse. And the level of discussion that the kids are having, and I mean actively" (Personal communication with interviewee, June 4, 2019).

All the graduate participants remember writing activities in their classes. Maria states, "I did a lot of writing" (Personal communication with interviewee, June 15, 2019).

Takara shares,

"In lit class, there was time writing and lots of discussions on reading and also lots of discussion in TOK" (Personal communication with interviewee, June 22, 2019).

Carter expounds by saying,

"Classes that held my attention best were the lit and TOK classes. I just enjoyed those more because I understood them and I really like to write. I could write some really good essays most of what we did was essay based. And we read books and plays and discussed what we read" (Personal communication with interviewee, June 12, 2019).

Sophie remembers,

"There was a lot of writing in lit and history. We had timed writing assignments where we had 45 minutes to write. So, we had to apply what we knew. And then, write about it, like for government we had to support tour view using certain documents. Some of these were timed and some were not" (Personal communication with interviewee, June 11, 2019b).

#### Levi shares,

"So, in pretty much all of my classes, across the board, we had writing assignments and that was a significant portion of our work. But that really prepared me for the IAs and the exams. Other than that, I think both my lit teachers did a good job of preparing us for these exams that we were facing" (Personal communication with interviewee, June 11, 2019a).

Collaboration. Several of the participants share a high amount of collaborative activities in their DP classrooms. Both the teachers and the graduates share this experience. The teachers share that collaboration is an important teaching strategy they learned in their IB trainings (Personal communication with interviewee, May 30, 2019a: Personal communication with interviewee, May 30, 2019b: Personal communication with interviewee, June 4, 2019: Personal communication with interviewee, June 24, 2019).

Angelina and Scarlett share specific collaborative activities that they implement in their classrooms. Angelina shares,

"Group work is a must and it must be a made an important component."

She continues,

"They did a presentation on a pre-Columbian dinner. They had to identify these significant men and explore who are you sitting them by. What is the people's conversation? What is it that you are going to serve as a meal? And I said, 'Now keep in mind that they didn't eat what we eat today.' So, that was interesting. It was really nice. They put together an invitation. One had, like, a scrolled paper. Someone had a simple pound cake for dessert and they brought that to share' (Personal communication with interviewee, May 30, 2019a).

Scarlett shares,

"We did a lot of partner, kind of look up this information and share it with your partner. So, they kind of shared the information. So, they didn't have to figure it out on their own."

### She continues,

"We did, like, basically mini DBQs. And they would do table practice with them where they would have to present two sides of an argument to each other based on the evidence of the documents and what they had figured out as the values and limitations of it. We did a couple of Socratics" (Personal communication with interviewee, June 6, 2019).

These collaborative teaching strategies are evidenced by the graduates' shared experiences.

Many of the collaborative teaching strategies are aimed at bringing the students to a higher level of thinking in reference to the content presented to them. All the graduate participants recall completing collaborative activities in their DP courses (Personal communication with interviewee, June 11, 2019a: Personal communication with interviewee, June 12, 2019: Personal

communication with interviewee, June 15, 2019: Personal communication with interviewee, June 22, 2019: Personal communication with focus group members, June 24, 2019). Takara shares, "It was a lot of group work."

She continues.

"Lots of discussions on reading and also, lots of discussions in TOK but I would say the majority of class was group work" (Personal communication with interviewee, June 22, 2019).

Carter expresses his lack of interest in so much group work in the classroom. He states, "We did group projects and group presentations. They were really heavy on collaborative work. I would have preferred independent but there was a lot of collaborative work. I do remember that" (Personal communication with interviewee, June 12, 2019).

*Creative activities.* The participants share several creative activities that the teacher implemented in the classroom to increase engagement with the content. Levi and Sophie recall a classroom activity that gripped their attention and helped them take ownership of the concept the teacher was presenting. Levi shares,

"In lit, we watched a lot of criminal minds. And we talked about the episodes. And we were able to analyze and predict things in literature a lot better after that" (Personal communication with interviewee, June 11, 2019a).

Sophie recalls,

"So, like one time we used M&Ms to figure out math equations" (Personal communication with interviewee, June 11, 2019b).

Both of these participants benefit from the creativity of their teacher. From the teacher perspective, Angelina and Zaria share unique activities which require research, critical thinking, and bring an intrinsic value to the assignment. Angelina shares ,

"The, *Think you can Text*, was related to the cold war era. So, you had to write a message from one political figure to another using texting. But it had to be related to the content we were studying in that chapter. So, that was a challenge. That was a challenge. So, they had to be able to write it out. And at the bottom, they had to write out in clean what is your message so I was able to read and understand" (Personal communication with interviewee, May 30, 2019a).

Zaria shares the personal influence she has with a student by helping that student take ownership of the activity. She recalls,

"I remember doing future leaders' week. And during this week, we take the best of the best out of the different careers. And we teach the kids about those careers. And we take a survey before we start the week. And we get the careers that come up the most, as far as the careers the student want to pursue when they graduate. And I remember. I had one student. And she's a Hispanic girl. And she said she wanted to be a professional ballerina. She was extremely smart and really quiet."

Zaria further explains how the student felt she couldn't be a ballerina because of her ethnicity. Zaria responds to the situation,

"So, I went and did some research I presented the information to her and it gave her to make a connection. Whatever you want to do in life don't let the determining factor be whether or not it's just you who's doing it. That should be the primary reason you do, do it. (Personal communication with interviewee, June 24, 2019).

Independent work. Several participants reflect on the importance of independent work. The teachers recall having the students write and complete assignments independently to see each student's understanding of the content that was presented (Personal communication with interviewee, May 20, 2019a: Personal communication with interviewee, May 30, 2019b: Personal communication with interviewee, June 4, 2019: Personal communication with interviewee, June 24, 2019). Rose emphasizes the importance of individual work by stating,

"They do a lot of independent work" (Personal communication with interviewee, May 30, 2019b).

As a student, Carter likes to work alone. He states,

"They were really heavy on collaborative work I would have preferred independent" (Personal communication with interviewee, June 12, 2019)

The goal of the DP classroom is to make learning meaningful to the student. The teachers share how they are instructed to bring meaning to their classroom content in their IB trainings (Personal communication with interviewee, May 20, 2019a: Personal communication with interviewee, May 30, 2019b: Personal communication with interviewee, June 4, 2019: Personal communication with interviewee, June 6, 2019: Personal communication with interviewee, June 24, 2019).

Angelina expresses her reactions to students that want to work alone and memorize the history content. She shares,

"It's not memorization. If you are coming into this course to memorize, oh my gosh, I feel for you. Its' trying to make connections. Why did this happen? Why does it happen

at this time? And maybe, why does it repeat? And why is there something similar at that time period (Personal communication with interviewee, May 30, 2019a)?

The goal of an engaging classroom is to get a student to the place of asking questions like these that Angelina presents, which brings them to a place of critical thinking.

Vincent shares the focus of the IB classrooms in his school. He states,

2019).

"One thing I notice about the IB classroom is the kind of projects and performances.

There is really a focus on alternative assessment and creative displays you see in different classrooms. From sciences to the arts, really reveals focus on students producing work that is thoughtful and meaningful" (Personal communication with interviewee, June 4,

**Research Question 3.** What challenges did educators and gifted and talented graduates face during their experience in the International Baccalaureate Diploma Program?

All the participants share challenges they faced during their experience with the DP in their response to question eight in the teacher interviews and question seven in the graduate interviews. These challenges of the participants appear in Theme Three: Challenges. Theme Three is divided into subthemes. The subthemes are: In the Classroom, In the Program, Personal and Twice Exceptional.

In the Classroom. The participants shared their view of how the teacher sets the atmosphere in their classroom. The classroom atmosphere may or may not be conducive to active learning practices. As a teacher, Rose shares how challenges arise in her higher-level math courses. She states,

"Well, I get frustrated with counselors who place kids in a higher-level math class who don't belong there. And, you put in all this effort. And, the kid struggles."

She continues,

"DP is a beast of its own and I think students should be well vested before they are put in there" (Personal communication with interviewee, May 30, 2019b).

Rose exemplifies both the teacher and the student striving for success and just missing it.

From a student viewpoint, Levi shares a different struggle in the classroom. He states, "So, throughout my DP years my math teachers were from another country and had strong accents. And they didn't understand English on the same level as an American teacher. So, that made it very difficult for me as a student to learn."

He continues,

"The higher-level math was not noticeably harder. They were just the next math that was coming. And to be honest, I didn't have great teachers for those classes. And so, that affected my perspective on math in general. I didn't take the exam for them seriously (Personal communication with interviewee, June 11, 2019a).

Maria's struggle in the classroom is from a different perspective. When asked what her greatest struggle was, she replies,

"Keeping up with the workload" (Personal communication with interviewee, June 15, 2019).

Maria is very serious about her classes and her seriousness makes her classes stressful.

In the Program. The unique aspects of the Diploma Programme bring challenges to the teachers and the students. Most of the teachers experience challenges stemming from the expectations of a DP teacher. Angelina feels her biggest challenge is when she first began teaching in the DP. She was not able to attend training until then end of the first quarter of the school year. This created a great struggle for her. She recalls,

"So, fall comes around and I had nothing. I was just using the materials that were left in the classroom. And I will tell you that it was a struggle. Every Sunday it was a struggle. It was a struggle."

### She continues.

"But that first quarter, I tell you it was rough. Training on myself. And then, in October, there was training I attended and then training came around for the summertime" (Personal communication with interviewee, May 30, 2019a).

Scarlett shares a similar struggle with Angelina concerning training. She had attended training before teaching her first year but felt overwhelmed at the expectations of the program. She shares,

"I was just incredibly overwhelmed. So, I had all of the DP students. And while some people are like, well that's not a big deal. But it is when you have 125 of them between 3 classes. And I was in charge of their IA for history. So, I did their history IA and I was freaking out. First of all, I was like, I don't feel comfortable scoring these. I mean I wanted more training to score them. I didn't feel the best teaching it. I kind of figured it out and then ultimately, I talked to somebody who taught at a different school who gave me some ideas. And then I ended up using my department teachers to help me score it."

"It ended up working out fine. So that was good, but it was just very stressful for me. It was also very stressful for the students" (Personal communication with interviewee, June 6, 2019).

Transitioning into the DP, as expressed by the participants, brings with it struggles and stressors. Once that transition is complete and the teacher is comfortable in the DP classroom

the amount of stress reduces. Rose explains her experience in the DP with confidence due to the amount of trainings she has attended (Personal communication with interviewee, May 30, 2019b).

Vincent contributes the challenge of entering the program to the language used in the program. He shares,

"You know I think for most of us there is a new a different lexicon of terms, a new language to the IB. Which I think, for many folks, that represents a kind of a challenge to learn the language of IB. And I think that has probably been the hardest thing. And to see where to see where things actually mesh with other things that we know and that are more familiar to us"

### He continues,

"For example, some of our teachers and administrators got together last summer and built a kind of crosswalk. And, it has all of the IB approaches to teaching and learning in one column. And then, it has all of our state teaching standards. And then, the next one, it has all of our AVID strategies. And how they all line up. And, it's kind of a crosswalk, if you will. And it's awesome. But if I was a new teacher teaching here, I would be totally overwhelmed by that, you know. And thinking well, how do I conceptualize this and how do I use it? How do I make meaning of it (Personal communication with interviewee, June 4, 2019)?

Over time, the teachers adapt to the newness of the DP and it feels natural implementing the teaching strategies and talking the language.

Zaria has a different type of struggle within the DP. First, when it comes to the trainings and learning the new language, she states,

"Honestly, I actually loathe the politics of it."

Another aspect of Zaria's struggle is relational with the IB Coordinator at her school. She explains,

"She has been helpful but she is more, what I call, a theoretical teacher who looks at numbers, test scores, grades and behavior. And she takes these things and determines whether or not we are doing everything that can be done to ensure the success of the student" (Personal communication with the interviewee, June 24, 2019).

Zaria shares that her view as a teacher is more relational. Even though the two coworkers are very different they have learned to work past their differences (Personal communication with interviewee, June 24, 2019).

For the graduate participants, the challenge of the program is the stress brought by the exams. Both Sophie and Maria describe how stressful the exams were to them. Sophie shares, "Mostly just, like, because in all of my classes one thing built off of another. Like, in my other classes, we learned something and then we moved on from it. But in my DP classes, we learned about something at the beginning of the year and you had to remember that at the end of the next year because it built on. So, once the time for exams rolled around, I would have to remember what I learned so much earlier. So, I had to remember everything I needed to know" (Personal communication with interviewee, June 11, 2019b).

Maria explains the extent of stress she feels affected her body. She recalls, "The stress of the exams, I would get so nervous and anxious that I developed stomach issues. So, it was a lot of pressure" (Personal communication with interviewee, June 15, 2019).

*Personal.* One participant shares his lack of study skills as his biggest challenge during his years in the DP. When asked his biggest challenge, he replies,

"Probably time management, I am a procrastinator at heart. I would rather read. I would rather sleep. And I'd rather play video games than do my schoolwork. And I found that it was very hard for me to maintain good grades if I didn't study and do homework. So, I think the hardest part for me was to know that I had to set aside time to do homework. And most importantly, set aside time to study. I never really was one to study. I think I spent a total of 3 whole hours during high school studying. I think that definitely killed me" (Personal communication with interviewee, June 12, 2019).

For Carter, he had to learn good study skills to help him succeed in high school.

Twice Exceptional. Takara remembers experiencing challenges that were unique to her. English is the second language for Takara. Japanese is the language spoken in her home. In addition to being bilingual, Takara deals dyslexia. For Takara, studying with dyslexia is a daily battle to overcome. She gives a glimpse inside her struggle by sharing,

"I think I really had one class that was super challenging and that would be the lit class. That was definitely more difficult, like, to catch up to everyone. And so, like, my dyslexia is worse when I get stressed. So, it would make it really difficult to learn and understand. And sometimes I would not understand what the teacher was saying or I would misread something on a paper and do it wrong. And so, I would have to go talk to the teacher. And luckily, the teachers were really lenient with it. And so, I could redo the assignment because they understood what was happening. That was probably the most difficult part. So, in some of my classes it was hard to understand because of the reading and understand what was happening. So, having to research stuff that I didn't

understand at first. So, I was really dependent on my teachers to help me with that stuff' (Personal communication with interviewee, June 22, 2019).

**Research Question 4.** What factors do the educators and gifted and talented graduates attribute to the perseverance to high school graduation?

The participants share their lived experience expressing what they viewed as attributing factors to success. These findings appear in Theme Four: Factors for Success, which is also divided into four subthemes: Engaged Classroom, Support System, Motivation, and College Preparation. The teacher participants express how they support the students and focus on connections with their students. The graduate participants all share their security in knowing that there were supports in place encouraging them to finish high school and successfully obtain an IB diploma.

Educators. The shared experiences of the teacher participants reveal them to be genuinely caring teachers who strive to build relationships with their students. These relationships help to create positive learning environments in the classrooms where the students are comfortable and confident with the guidance of their teacher. Zaria interacts with her students looking toward their future. When talking to her students she states,

"I want you to know this information I am teaching you and be able to apply it beyond these four walls and use it for your benefit. So, I think that's the best way to prepare them for the future. For them to understand how its applicable and how they can utilize it. Because if they can't use it, they can't see the benefit in it. So, that's what I try to do" (Personal communication with interviewee, June 24, 2019).

Once the classroom is meaningful to a student, then the teacher can implement engaging teaching strategies that inspire the student to connect intrinsically with the content.

The teaching focus of the IBDP is a student-focused education. Scarlett is a previous AP teacher, now that she has experience in the DP she shares the difference. She states,

"That is one thing that is nice with DP over AP is that it allows a person to explore other things that they are interested in as part of the IA process. Because in AP, there's no time for that and it's basically a research driven essay for them. And in DP, it's not just for history but for every other DP course. So, they can explore some of those things that are going to help them. Explore some of those things that are interesting to them, that's going to help them progress and learn" (Personal communication with interviewee, June 6, 2019).

## She continues,

"With the students who are gifted artistically, they have the opportunity to express that creativity in, like, the DP versus that of the AP. Because that is the comparison. If your gifted, and smart, and driven then, you're either going to go AP or DP. But I don't think, like I said, in AP there's not a lot of room for exploring what you're interested in within the course. You're, kind of, limited in what is being offered. But for the IA, I said, 'This is what we have to do. These are the requirements and you can pick anything that interests you from these requirements" (Personal communication with interviewee, June 6, 2019).

The view of student-motivated learning is a driving factor for students to take ownership of their learning.

Vincent shares a range of supportive factors for the success of GT students in the IBDP. Fist, he looks toward the students who make up the classroom setting. He states,

"I would say the fact that they are in classes with one another." (Personal communication with interviewee, June 4, 2019).

With the rigorous reputation of the IBDP, it comprises of students who are familiar with that reputation and are ready to face the challenge of the rigor. Vincent discusses the classroom practices creating a successful learning atmosphere for GT students in the IBDP. He shares,

"There's this focus on, not only, group projects but on collaboration and on discussion. That is, it is group based. So, they have this great benefit of working with one another" (Personal communication with interviewee, June 4, 2019).

Finally, Vincent shares that, at his school, the reason he believes these healthy learning environments are evident is the careful selection of DP teachers. He explains,

"They have this great benefit of teachers, who the school has really been selective in who they have selected for that. There is an internal interview process for teachers who teach DP. And they are informed of the extra expectations, such as extra trainings, they will be required to go to. And the school is going to invest in you. So, if you get this particular spot you need to know what is expected of you" (Personal communication with interviewee, June 4, 2019).

The careful selection and investment into DP teachers, creates the learning atmosphere in the classroom that the IBDP is all about.

*Graduates.* The overall factor the graduate participants express is the knowledge of having a support system in place to get help when needed. The biggest support factor discussed is the helpfulness and accessibility of their teachers. The graduates all remember their teachers offering tutoring and implementing a clear communication system with them (Personal communication with interviewee, June 11, 2019a: Personal communication with interviewee,

June 11, 2019b: Personal communication with interviewee, June 12, 2019: Personal communication with interviewee, June 15, 2019: Personal communication with interviewee, June 22, 2019).

Maria shares her appreciation,

"To get feedback from my teachers that I was going to do well on the IAs" (Personal communication with interviewee, June 15, 2019).

Sophie appreciates how the teachers implemented alternative assessments in her classes. She recalls,

"So, for my graphic arts class we were given like a year project to make, like, a portfolio of our work. So, like, I did an interior design project. I, like, had a budget I had to work with. And like, I designed a remodel for a charity organization's building that's like not too far from my school. So, like, I had to make the entry really open. And like, I had to make a color theme. And like, I had to go to the store and get, like, color samples and, like, fabric swatches and stuff like that. It was a lot of work. And, like it counted as my CAS (Creativity, Activity, Service) project" (Personal communication with focus group member, June 24, 2019).

Takara shares how she connected with her teachers teaching the IB Learner Profiles. She shares,

"A lot of teachers would have us take test at the beginning of school to see what our learner profile was. So, we could learn about ourselves and how we learn. So, then, we would have elements of class that would be directed to those learner profiles" (Personal communication with interviewee, June 22, 2019).

Takara refers to the Learner Profiles several times during her interview. This aspect of the IBDP is a strong influence in her life.

Some of the graduate participants express how supportive their peers in the DP were to them. Maria shares,

"So, in the DP, everyone is there doing the same thing. So, I wasn't alone. So, we had study groups and if I was struggling with something, I could always ask my classmates" (Personal communication with interviewee, June 15, 2019).

Carter explains a unique way that his peers supported one another. He states,

"One thing I remember helping out was in my first DP class, which was history, someone in the class started a massive group text conversation. And it was about 50-60 students involved in that group. And if anyone had a question, they would post it to the group. And one of the star students would rather quickly respond. It was just nice to see students working together on that one" (Personal communication with interviewee, June 12, 2019).

The participants highlighted the comradery of the DP students in their schools. They recall working as a team with their peers creating a safe learning place for them.

A final support factor the participants mention is the support of their family. Maria shares how her mother was a strong support for her during high school. She states,

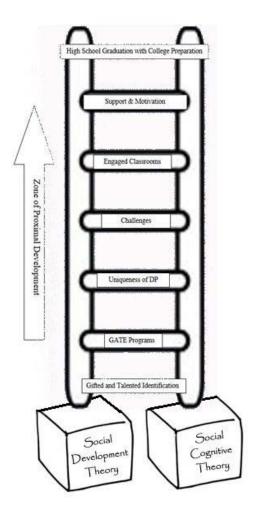
"She knew how smart I was. So, she always encouraged me" (Personal communication with interviewee, June 15, 2019).

Exemplifying the security in a strong support system throughout her high school years, Maria shares,

"I had parents and teachers supporting me. So, every assessment I walked into, I felt like I could pass" (Personal communication with interviewee, June 15, 2019).

Figure 2

GT Students' Ladder to College Preparation



# **Summary**

The participants consist of both GT graduates of the IBDP and DP teachers. The graduate participants share their personal experiences in GATE programs in the early years of their education and how those programs set them on the course to enter the DP to finish their high school. Together, the graduates and teachers present the uniqueness of the Diploma

Programme. The participants reveal challenges that they faced and overcame. These challenges range from the unique aspects of the DP to personal challenges of various natures. All participants share factors of their lived experience that they view as contributing to GT students successfully obtaining an IB diploma. Through a writing prompt activity, the participants share advice to students that might be considering entering the IBDP.

The four research questions of this study are answered from a multitude of factors. The shared lived experience from either teaching or participating in the IBDP answers research question number one. Research question number two is answered by both the teachers and graduate participants sharing classroom practices that proved helpful in their success in the IBDP. The challenges the participants faced are presented in response to research question number three. To answer research question number four, the participants share that some of the factors contributing to the success of the GT graduates include: engaged classroom activities, supportive and approachable teachers, motivation and becoming prepared for college. A key factor arising from the data is the connection between the students and the teachers. The heart of the teachers is to provide a safe and caring learning environment for their students. In turn, the students overwhelming respond that their teachers were helpful and encouraging, creating a security within the students, which helped them face their challenges with confidence for success.

#### **CHAPTER FIVE: DISCUSSION**

#### Overview

The purpose of this study is to investigate the perseverance of gifted and talented graduates of International Baccalaureate Diploma Programmes. In this chapter, the researcher shares the summary of the findings. The researcher discusses the implications, considering both the theoretical and empirical literature regarding the pertinent literature and theories that support the study. The researcher explains the delimitations and limitations of the study. Finally, recommendations for future research is provided.

# **Summary of Findings**

Gifted and talented graduates of the of the IBDP share many support factors behind their successful completion of the program. The participants share their lived experience either teaching in the program or completing the program. The teacher participants describe the specific IB training that is a requirement to be a DP teacher. These trainings make being an IBDP teacher a unique experience. The participants refer to the reputation the program has for rigor as the reason for pursuing it.

# **Research Question 1**

Research question one asks how both educators and gifted and talent graduates describe their experiences in International Baccalaureate Diploma Programmes. For the educators, they share how they enjoy working with the academically higher-level students. According to Rose, "...I just enjoy working with that level of students" (Personal communication with interviewee, May 30, 2019). Vincent describes his experience in an IBDP as, "a journey." He explains, "It's been an invigorating experience for everyone, not just the teachers but for the students" He describes the students in an IBDP classroom as "not just studying it but actually owning it"

(Personal communication with interviewee, June 4, 2019). These teachers express how the IBDP atmosphere is more than direct instruction but a learning experience for students resulting in self-directed growth.

The graduates explain how they have been in advanced courses since their experience in GATE programs in elementary school. For them, the IBDP is just the next step in a rigorous education. For Levi, the experience is a confident memory and he shares his enjoyment of the in-depth class discussions which led to his growth in self-led learning (Personal communication with interviewee, June 11, 2019). On the other hand, Sophie describes her experience as, "Very stressful, especially particular classes" (Personal communication with interviewee, June 11, 2019). Maria, like Sophie shares the stress of her experience, "It was a lot of pressure" (Personal communication with interviewee, June 15, 2019).

Both the teachers and the graduates communicate the fulfillment they experience in being a part of the DP. These educators hold a sense of pride in being part of such a distinguished organization along with the opportunity to aid in the growth of students. The graduates all express thankfulness, accomplishment, and pride in being a recipient of an IB diploma. The graduates share how successfully completing the IBDP resulting in the rewards of college credits lowering the price tag of their college career. For that, they are thankful.

### **Research Question 2**

What characteristics of classroom practices do educators and gifted and talented graduates identify as influential to the graduates' academic persistence in International Baccalaureate Diploma programs? Both the IBDP teachers and graduates believe that an engaged classroom is a main focus for the success of students. They share that they feel the best

learning atmospheres are created in classrooms with actively involved teachers implementing engaging activities, which create intrinsic value for the students. Levi says,

"What really makes or breaks the classroom, at least for me, is knowing the teacher cares. And I think that's really where learning happens is where the student and the teacher both feel safe and comfortable and they are able to help each other grow" (Personal communication with interviewee, June 11, 2019).

Teachers in this type of classroom implement creative activities that bring meaning to the content being presented. Several of the participants elaborate on the amount of in-depth discourse that occurs in the DP classrooms, which creates an active involvement between the teacher and the students in the class. The teacher participants all share their willingness and desire to attend IB trainings to learn more teaching strategies and how to better serve their students. The graduates recall the engaging IBDP classrooms as being engaging and enjoyable.

# **Research Question 3**

What challenges did educators and gifted and talented graduates face during their experience in the International Baccalaureate Diploma Program? The participants experience challenges in four areas. First, there are challenges described that took place in the classroom. These challenges focus on the engagement of the teachers with the students. Maria gives an example,

"One of my classes, the teacher was kind of a slacker. So, I just didn't get into it. She had a good command of her subject but I just wasn't engaged in her class" (Personal communication with interviewee, June 15, 2019).

Sophie agrees with Maria,

"It was kind of like a hit or miss with teachers. Some teachers were, like, easy going and

it made the class like relaxing. But another one of my teachers was very, like, kind of uptight and it made the class feel, like, stressful. And made you feel like I'm doing stuff wrong and am I gonna fail, which I wasn't because it was just one little thing" (Personal communication with interviewee, June 11, 2019).

Carter reflects on his struggle,

"Occasionally I would feel angry. Like I wasn't given enough information. Like the cards were stacked against me, feeling like I just wasn't given enough. Of course, I look back now and see I was given enough. I just didn't apply it in the right way" (Personal communication with interviewee, June 12, 2019).

Second, the participants share challenges with expectations and responsibility that come along with being a part of the DP. The DP is unique and the participants share their struggles with transitioning into the program. Vincent points out the challenge of learning the IBDP for teachers,

"I think that IB brings its own language to things. The hardest learning curve is just remembering to call things the right the right thing and then sometimes I think if the we are confused about that as educators, then what about our students?" (Personal communication with interviewee, June 4, 2019).

The graduates describe the challenge of their senior year as ensuring all the requirements were met for their diploma. Maria shares,

"I would get so nervous and anxious that I developed stomach issues. So, it was a lot of pressure" (Personal communication with interviewee, June 15, 2019).

Third, some of the participants share personal challenges they face and overcome, which makes them a better person. According to Levi,

"So, I think it was the higher expectations of the DP and STEM program that just slowly transitioned me into a higher level of difficulty and made me a better student with that" (Personal communication with interviewee, June 11, 2019).

Finally, the challenge of being twice exceptional is shared by Takara.

"So, like, my dyslexia is worse when I get stressed. So, it would make it really difficult to learn and understand. And sometimes, I would not understand what the teacher was saying, or I would misread something on a paper and do it wrong. So, I would have to go talk to the teacher and luckily the teachers were really lenient with it. And so, I could redo the assignment because they understood what was happening. That was probably the most difficult part" (Personal communication with interviewee, June 22, 2019).

Her struggle is now her strength.

# **Research Question 4**

What factors do the educators and gifted and talented graduates attribute to the perseverance to high school graduation? There are several factors that leading to the success of the graduate participants. The first factor for success is the engaged classrooms in their DP courses. These classrooms encourage the students to participate in higher-level learning practices. The graduate participants recall a strong support system during their years in the DP. They share how the students in their classes supported one another with a team mentality. Every graduate describes how their teachers were helpful and available for the students. Levi describes it as,

"All the teachers were very helpful. I guess you could say I would have been comfortable going up to any of my teachers, in any of my classes and saying, 'Hey, look I don't understand this.' But I found that almost all of my teachers prepared us in such a

way that you didn't have any excuse if you did fail. They really did a good job preparing us for their assignments and for the IAs" (Personal communication with interviewee, June 11, 2019).

These graduates know their teachers were cheering them on for a successful completion of an IB diploma.

The graduates share how simply being a part of the IBDP motivated them toward success. They are well-aware of the rigor involved with the program and were motivated to take on that challenge. They also focus on the benefits of obtaining an IB diploma, such as college credits and prestige. In high school, the IBDP teachers regularly reminded the graduates that they were taking college level courses in high school. Being in that type of atmosphere inspired confidence within the students that they would be successful not only in the IBDP but in college as well. Maria shares,

"I went straight into college from high school and I was totally down with all the reading. And I could keep up with it. I could keep up with all the assignments. It was so much reading during my literature classes. So, all my DP classes really prepared me for college. And I was really happy, especially with my college, because they accepted and gave me full credit for my years in DP courses" (Personal communication with interviewee, June 15, 2019).

#### **Discussion**

A discussion on the findings of this study is presented in relationship to the empirical and theoretical literature that served as the study's foundation. The social cognitive theory and the social development theory are discussed. A discussion on the empirical literature that supports

the research is presented. How the research corroborates and diverges from previous research is also discussed.

#### **Theoretical Literature Discussion**

The study is corroborated by the social cognitive theory and the social development theory that were presented in Chapter two as foundational to this research. The social cognitive theory, founded by Albert Badura, is described as a process of learning behavior patterns through experience or observations of behaviors (Bandura, 1971). The social development theory, by Lev Vygotsky, builds upon Bandura's social cognitive theory, and states that learning is directly related to the social interaction of the learning environment (Vygotsky, 1978). These theories are closely related and both are evidenced in the lived experiences of the participants.

The participants share their experiences of learning through engaging and energetic classrooms. A positive learning environment where the students are actively involved will inspire students to take ownership of their learning and help their peers learn as a result (Özerk & Özerk, 2015; Thacker, 2017). The graduate participates share experiences in engaging classrooms beginning in elementary school when they began GATE programs. According to the social cognitive theory, reinforcers instigate behaviors based upon the individual's self-efficacy beliefs (Bandura, 1977, 1986). The graduate participants' self-efficacy began to be shaped in those early years in GATE programs. These students knew they were treated differently because they were smart. This perspective follows each of them throughout their school years.

All the participants reveal a high self-efficacy. Bandura explains how people with high self-efficacy exude critical thinking skills when challenging situations present themselves (Bandura, 1993). Teachers with high self-efficacy set the tone in the classroom creating an active and energizing atmosphere (Siegle, et al., 2014). The teacher participants of this study

share how they implemented engaging teaching strategies and created a positive relationship with their students. The graduate participants meet the challenge of the rigorous DP and endure to see success at the end of high school, which exemplifies a high self-efficacy in each of them.

The participants overcame the various challenges they faced and continued to move forward confident they would be successful. This study emphasizes the importance of rigor and engagement in the DP classrooms to provide an atmosphere for optimal learning. It may be presumed that my participants connected intrinsically with the course content in classrooms where they experienced and observed active engagement and the importance of that content. This study supports the social cognitive theory.

The social learning theory is relative to this study. Educators have discovered that the process of learning is built over time and that learning process is influenced by the learning atmosphere (Knafo, 2016; Moore, Westwater-Wood, & Kerry, 2016; Thacker, 2017; Wu et al., 2015). Vygotsky's ZPD influences a student's learning potential through building new knowledge upon prior knowledge (Kanevsky, 2015; Moore et al., 2016). Through the shared experiences of the graduate participants, the building of their learning experiences is evidenced. These GT students were placed on a different learning track when they began their GATE programs in elementary school. The progression of their learning is seen as they transitioned into advanced courses for middle school and early high school. By the time these students were in the tenth grade, a rigorous program such as the IBDP was the next step in their learning process. The unique aspect of the DP is how the learning strategies are student focused and this was voiced through the lived experiences of my participants.

Vygotsky's social development theory is further seen throughout this study through the amount of collaboration the participants engaged in throughout their courses. Collaboration

helps students to build each other's knowledge, which is the essence of the social learning theory and Vygotsky's ZPD (Knafo, 2016; Moore et al., 2016). The graduate participants of this study collaborated with their peers regularly in and out of the classrooms. The teacher participants expressed how they set the tone of engagement and collaboration to the point that the students naturally respond to their classmates with help and encouragement.

Coleman (2014e) asserts that GT students require critical thinking and creative activities in the classroom to build their ZPD. The responsibility to ensure these engaging higher-level learning atmospheres are created rests upon the teachers (Siegle et al., 2016; Spanke & Paul, 2015). This is evidenced in this study through the shared experiences of the teacher participants. The teacher participants attend IBDP trainings to learn more about implementing rigorous and engaging teaching strategies in their classrooms. Engaging classrooms create environments where the students build upon their prior knowledge is perceived idea of the participants. This study supports the literature for the social learning theory.

# **Empirical Literature Discussion**

The literature discussing the education of GT students examines the prevention of underachievement in GT students. U.S. legislation creates a clear definition of giftedness for school systems to use as a reference for their GATE programs from *The Marland Report* as presented in Chapter two (Abeysekera, 2014; Colangelo & Wood, 2015; Marland, 1972; Olszewski-Kubilius et al., 2015). Research suggests that the identification of giftedness early in children is imperative to prevent underachievement and provide the best education to maximize their potential (DeNisco, 2015; Foreman & Gubbins, 2015; Kaul et al., 2016). All the graduate participants are identified as GT students at the elementary school level. Eighty percent of the GT participants were identified as gifted through the observation and suggestion of their

teachers. The remaining twenty percent was identified by their parents and entered the GATE program through the collaboration of their parents and the school. Once the participants were identified, they were placed on an advanced-level educational track within their school system. This study affirms the existing literature that early identification of giftedness supports the academic achievement of GT students.

GT students are more productive and engaged when they are grouped with peers within their same skill level. Peters & Matthews (2016) suggests homogenous grouping in regard to GT students while Gentry (2014) and Gallagher (2015d) furthers the concept with sharing the premise that homogenous grouping creates a comradery among the GT students through intellectual discussion. When GT students are grouped with other GT students, they can delve into a deeper level of thinking, enhancing each other's learning. The participants of this study describe this occurring in their classrooms because the IBDP sets students apart based upon rigor and focuses on in-depth discourse in the classroom. Thus, this research supports the existing premise in research of the benefits of homogenous grouping among GT students.

This study supports the existing research of Koshy & Pinheiro-Torres (2014) that explains the necessity of a positive, active learning environment designed with GATE as a focus. Fiksl & Aberšek (2014) propose that this type of learning environment is created by the teacher, while Vuyk et al. (2016) furthers that it always necessitated support and encouragement. The teacher creates a positive learning environment for the students through their interrelation skills and teaching strategies they implement in the classroom. All the teacher participants reflect such an atmosphere in their classrooms, while all the graduate participants recall flourishing in classrooms with a healthy learning environment geared toward higher-level thinking.

This study supports the premise of Walker & Vanderploeg (2015) that expresses how exceptional teachers are necessary for teaching GT students because they connect with the students on a different level according to Horak & Galluzzo (2017). Vincent reveals this substantiating premise by stating, "I don't think you can throw any teacher a group of gifted and talented students and expect they are going to do as much for their enrichments as a teacher that has the capacity to work with them" (Personal communication with interviewee, June 4, 2019). The teachers in this study evidence making personal connections with their students while holding to high academic standards in their classrooms. The student participants share memories of exceptional teachers who genuinely cared about the progress of their students in the classroom.

Beasley et al. (2017) suggest that teachers of GT students must set high academic standards and monitor student progress to ensure they are creating a healthy learning environment for GT students. This research supports the literature. The teacher participants share how they have high expectations for the students in their classrooms. They also implement class activities, such as timed writing assignments, to monitor the progression of their students and to prepare for the IAs the students will encounter. Coleman (2014b) emphasizes the importance of teachers making adaptations in response to progressive monitoring. Angelina exhibits this through her statement, "So let's go and search for more on my side to do more of the research and tweak the activities to have them work at a higher college level" (Personal communication with interviewee, May 30, 2019a). All the teacher participants share similar stories of maintaining a higher-level thinking atmosphere in their classrooms through student progress monitoring.

A classroom engaged in higher-level thinking activities is usually centered around indepth discussion which GT students find enjoyable to share and learn from their peers (Gallagher, 2015d; VanTassel-Baska & Hubbard, 2016). Coleman (2014b) furthers that GT students experience an increase in learning through deep discourse by asking probing questions. Vincent substantiates these premises by sharing,

"A big part of what is going to support their readiness for college is just building that that incredible skill of how do you engage in academic discourse at a high level using disciplinary literacy. And what I mean by that is: how do think about science like a scientist? How do you talk about math like a mathematician? It's like the students aren't just learning about a subject from the outside. They are learning about subjects from the inside and adopting that language of an actual practitioner in that particular skill" (Personal communication with interviewee, June 4, 2019).

All the graduate participants recall high amounts of critically thinking discourse in their high school classrooms. This study enhances the premise of GT students flourishing in learning environments consisting of high-level discourse.

The teacher participants express attending training by the IBDP to learn new teaching strategies and how to correctly implement the specifics of the program. The high level of teacher professional development the participants describe enhances the research by Siegle et al. (2014) that explains the importance of professional development for teachers teaching GT students. This study also furthers the research of Beasley et al. (2017) that stresses not just the importance of professional development for GT teachers but also easy access to resources for classroom ideas. VanTassel-Baska & Hubbard (2016) suggest that professional development for GT teachers should be annually and with other schools. The teacher participants share how the IB

coordinator at their school is a valuable resource to help them with implementing the program, classroom resources and with scheduling their yearly instructional conferences within the district as well as out-of-state with other IB schools around the nation.

Several pieces of literature presented in Chapter Two discuss the importance teacher collaboration. Collaboration between teachers not only builds comradery but increases creativity in effective classroom activities (Coleman & Gallagher, 2015; Kahveci & Atalay,2015; Roberts et al., 2015; Van Tassel-Baska & Hubbard, 2016; Wu, 2017). The teacher participants experience a high level of teacher collaboration. Rose shares, "Our big support is that we work as a team" (Personal communication with interviewee, May 30, 2019b). This study reveals that within the IBDP collaboration between teachers is an expectation of the program that the teachers appreciate and engage in willingly.

The teachers in this study clearly expresses their understanding of GT students and the responsibility that they as teachers carry to challenge these students helping them to grow academically. The teacher participants in this study did not exhibit any of the misconceptions of GT students as presented in the literature in Chapter Two such as: 1) GT students can teach themselves, 2) every student is gifted and talented in some way, 3) identifying a student as gifted is an elitist mind set and unfair to other students, and 4) focus of educators to treat all students equally with no consideration to their educational needs (Gallagher, 2015a; Gallagher, 2015b; Jung et al., 2015; Muratori & Smith, 2015; Yeung, 2014; Young, 2016). The teacher participants in this study align their classrooms with the words of Thomas Jefferson, "There is nothing more unequal than the equal treatment of unequal people" (Yeung, 2014, p.808). This study aligns with the Finnish view of giftedness, "Optimal environmental factors such as support and opportunities are needed for persons to truly maximize their potential" (Laine et al., 2016, p

153). The belief that every student is unique with unique academic needs and should be educated according to their level of necessitation is revealed in the lived experiences of the participants.

This study deviates from the research of Coleman and Cross (2014) that discusses how GT students feel their giftedness is a handicap. The GT participants express how the GATE programs they were involved with helped them to realize they were smart. They explain their GATE programs as being fun and engaging. Takara, a twice exceptional participant, shares how her GATE program helped her, "reflect on how we learned and how we grew" (Personal communication with interviewee, June 22, 2019).

There is a gap in literature in the perspective of GT students in the IBDP. This study fills the gap by presenting how the IBDP helps brings GT students together as a team working toward the same goal of high school completion. A strong sense of peer teamwork is expressed by my graduate participants as a support for obtaining their IB diploma.

LaPrad (2015) explains that academic excellence does not happen on its own but that it occurs through the intentionality of educators. This research supports the literature. The teacher participants reveal that they implement high-level thinking discourse and activities in the classrooms. Progression of the students is monitored by the teachers and the teachers are monitored and supported by their IB coordinator and administration faculty. Monitoring through a chain of command type program ensures the successful progress of the students in the DP. The graduate participants share their view of how the teachers implement activities leading to their successful completion of all component of the IB diploma.

The IBDP is a good fit for GT students in that it challenges the students to maximize their intrinsic potential. VanTassel-Baska and Hubbard (2016) describe aspects of gifted education to

include scaffolding of higher-level thinking activities and interaction with students with similar skill-set levels. Moon (2016) enhances that description with the result of students performing beyond their perceived capabilities. The participants reveal how the IBDP implements high-level thinking activities regularly in the classroom and they share how they successfully completed the rigorous DP.

The participants reveal, in many ways, how the IBDP is strategically created for high achieving students, whether they excel academically or artistically. Kanevsky (2015) explains how the learning strategies of the IBDP are foundational for gifted education. Conley et al. (2014) furthers that premise by explaining how the IBDP focuses on communication and inquiry, which creates a healthy learning atmosphere for gifted students. The participants describe such activities occurring in their DP classrooms. The graduate participants reflect on how much they learned in those classes and contribute those activities to helping prepare them for the college classroom.

This study deviates from the premise that American schools hesitate to reward academically gifted students (Coleman & Cross, 2014; Yeung, 2014). The foundation of the IBDP is to celebrate academic and creative giftedness in students. All the participants refer to the rigorous reputation of the IBDP. The graduate participants were part of the IB magnet program because their giftedness had placed them on an advanced track in school courses. They all express pride in receiving an IB diploma and college acceptance of their DP courses for college credits. The graduate participants support the premises of Park et al. (2014) and Lee (2014) that IBDP students persevere because they understand the prestige of receiving an IB diploma which instills a sense of pride in accomplishment.

GATE programs prepare students for college but the IBDP nurtures students to develop a career/life vision within them. Vincent states,

"The diploma program is a liberal arts education. It's one that requires a wide variety of subject areas but they have a choice on different levels."

He continues,

"It still keeps them moving forward in their skillset."

He provides an example,

"Like in global politics and they are doing MUN, they are not learning about politics from a student perspective. They are actually learning the language of politics as a politician, as an ambassador, as a delegate. So, they are learning to speak the language of diplomacy. Not speaking about it like it's a subject that is off in the distance. There is a sort of place where they take ownership."

He furthers,

"They are used to living it not just studying it but actually owning it" (Personal communication with interviewee, June 4, 2019).

This study expands the premises of Conley et al. (2014) and Dedrick et al. (2015) that describe the IBDP as designed for the nurturing of GT students and described why these students excel in the DP. The answer to this why question stems from how the DP helps the students to continue in a forward-thinking mind set toward their future.

# **Implications**

The implications of this study are presented. The empirical implications describe how related research reinforces the implications of this study. A discussion of the implications from

the social cognitive and social development theories is provided. Practical implications from this study that may serve as a guide to educational leaders is provided.

## **Empirical**

IBDP schools a good fit for GT student because the instructional strategies implemented in the classrooms consistently provide rigor and personal expression through discourse (Conley et al., 2014). Gifted students work well when grouped homogenously with their peers (Gentry, 2016). Grouping the students homogenously enables the educator to properly scaffold critical thinking activities that engage GT students (Akella & Jordan, 2015; Moore et al., 2016; VanTassel-Baska & Hubbard, 2016; Wu, 2017). Another aspect of a rigorous classroom atmosphere is the implementation of higher-level thinking discourse. This practice is considered a best practice for GT students and is an integral part of an IBDP classroom (Coleman, 2014a; Coleman, 2014b; Coleman, 2014c, Coleman, 2014d; Coleman, 2014e; Corly, 2014).

Educators hold the responsibility to prepare GT students for the task of leadership in society (Buchert, 2014; Renzulli et al., 2014; Steenbergen-Hu & Olszewski-Kubilius, 2016; Yeung, 2014). This task is not only completed through rigorous academics, but through helping students understand their giftedness nurturing them to become exceptions citizens when they step into society as adults (Fraser-Seeto, Howard, & Woodcock, 2015; Koshy & Pinheiro-Torres, 2014; Thacker, 2017). The IBDP fulfils this responsibility for GT students through a consistent focus on a global perspective and rigorous academia (Corlu, 2014; Fitzgerald, 2015; Park et al., 2014).

#### **Theoretical**

According to the social cognitive theory, students learn through lived experiences and observing the behaviors of the others (Bandura, 1971). GT students need active learning

environments where they have the opportunity to learn through personally experiencing the content being presented. Teachers of GT students should be trained in creating active and engaging learning atmospheres in their classrooms. The teachers should invest in their students through serving as a mentor building meaningful relationships toward academic success.

The social development theory is built upon the premise that learning is built over time and influenced by the atmosphere surrounding that process (Vygotsky, 1978). GT students need environments conducive to continual learning, which is above the level of the average classroom. These students need more than challenging assignments. The teachers of GT students should guide and direct them to a place of intrinsic motivation resulting in the ownership of learning. GT students are ahead of the average academic pacing and should be encouraged by educators to move forward in their abilities, discovering their potential in their giftedness to build a better society as a global citizen.

### **Practical**

Provided are suggestions for the consideration of stakeholders. These suggestions include recommendations for leaders of the IBO World schools, leaders of colleges and universities, leaders of the IBDP training DP faculty, IBDP administrators, IBDP teachers, IBDP students, and parents of GT students. The suggestions conclude with a recommendation for GT students.

Leaders of the IBO World Schools. The findings of this study reveal the unique aspect of guiding students to a career/life vision within the IBDP. The leadership of IBO World Schools should consider this unique characteristic as an honor to provide a platform for GT students to continue moving forward toward their future during the last of their high school years. This study reveals how the proper implementation of the IBDP provides a healthy

learning environment for GT students. The research may serve as an encouragement to the IBO World Schools for implementing such a strong program for GT students. The positive rewards of the IBDP that the participants received may be experienced by other GT students around the world.

Leaders of colleges and universities. Leaders of colleges and universities may consider offering college credits for courses completed by recipients of an IB diploma. The findings of this study reveal the graduates of the IBDP perceive their DP courses to be more rigorous and difficult than their first quarter of classes at their college or university. Students should be rewarded for the rigorous courses they have successfully completed. Providing college credits for DP courses may prove beneficial to the college/university through the advancement of these high performing students pursuing graduate level studies at the institution.

Leaders of the IBDP training DP faculty. Leaders of the IBDP responsible for training DP faculty may benefit from the findings of this study. The participants reveal the learning curve involved with learning the language, expectations and strategies of the IBDP. The teacher participants express the high investment they incur when they agree to teach DP courses. DP teachers should be offered effective and engaging professional development focused on classroom strategies that are fresh and creative for GT students. Providing invigorating professional trainings may stir creativity within these teachers to implement in their classrooms while mentoring DP students to success.

**School districts.** School districts could implement IB magnet programs in within their district as an advanced track for GT students. Once the IB magnet program is instilled within the district, the district should train the school counselors to guide GT students toward the IB magnet cohorts. The findings of this research reveal the positive results of placing GT students in an IB

magnet program at the elementary level. For the participants, this placed them in advanced courses and helped them know how they would progress through their school years. The participants share how the suggestions of the school counselors helped guide their educational path to high school completion. School districts may feel more confident that they are providing the best educational services for the students within their district.

School districts may use the findings of my research to improve their GATE programs and ensure proper financial allowances to IB magnet schools to fund necessary yearly trainings for IB teachers. The teachers in this study express the need for continual training while teaching in the DP. Providing such trainings both within the district schools and outside of the district for these teachers increases their confidence in the classroom to implement the instructional model for the IBDP.

**IBDP administrators.** IBDP school administrators may use the findings from this study to serve as an insight into the perspectives of the DP teachers in their school. The participants in this study reveal supportive administration in their schools. The only concern voiced through the participants is the desirous need for continual IBDP training. DP school administrators may take notice of this imperative need among DP teachers to ensure the teachers in their school receive yearly DP trainings to provide support to their teachers.

**IBDP teachers.** The findings of this research reveal the high level of investment required of IBDP teachers to properly implement the program in the classroom. This study exposes the challenges of attending trainings and fulfilling extra responsibilities that coincide with being a DP teacher. All the teacher participants had positive affirmations about being a DP teacher, even though they experience challenges and frustrations they must overcome. The participants enjoy the challenges of being a DP teacher and consider it to be rewarding. This

research may serve as an encouragement to DP teachers who face the challenge of teaching GT students on a daily basis. The positive rewards of guiding students to their career/life vision may be experienced by all DP teachers.

IBDP teachers may use the literature review and teaching strategies shared by the participants to enhance the learning atmosphere in their classrooms. DP Teachers should continually collaborate with one another to support each other and share best practices. The participants in this study express the value in collaborating with teachers within their school and with teachers they have met at IBDP conferences around the country. Sharing the implementation of instructional strategies brings fresh ideas to other teachers stirring their creative abilities to create lessons for their content matter.

IBDP students. IBDP students could benefit from the shared experiences of the graduate participants in this study. The IBDP brings with it challenges that can be overcome with the support of peers and teachers. The participants reveal a comradery built among their peers within the DP. DP students are working toward the same goal. The graduate participants share how the support and encouragement of their teachers and peers help them work through challenges. Fulfillment of the DP is rewarded with receiving an IB diploma recognized by many colleges and universities for college general education credits. This research may serve as encouragement for DP students to persevere through high school graduation and receipt of the IB diploma.

Parents of GT students. Parents of GT students should advocate for their child to receive an advanced level education. School counselors serve as the liaison between parents and the schools and should be advised of accelerated programs within the district such as the IB magnet program. A parent's goal is to pursue the best opportunity for their child. By advocating

for their GT child to be placed within the IB program, parents are opening opportunities for the child to experience healthy learning environments such as the ones expressed in this study.

GT students. GT students could self-advocate with their school counselor and parents to enter the IB magnet program in their school district. According to the findings of this study, the GT participants share positive affirmations concerning their placement in the IB magnet program. The program has a reputation of rigor and prestige. The participants enjoy the rewards of an IB education which may be shared by other GT students.

# **Delimitations and Limitations**

Delimitations and limitations are present in this study.

### **Delimitations**

Delimitations are intentional limitations the researcher places on the study to limit set the boundaries to reduce generalization (Joyner, Rouse & Glatthorn, 2013). There are several delimitations for this study. There is a gap in literature explaining the perseverance of GT students in the IBDP. In this research, the perseverance of gifted and talented graduates of the IBDP is studied through five graduate and five teacher participants. All participants are over the age of 18.

The teacher participants in this study are IBDP teachers. The researcher sought to explore the essence of the teachers' lived experiences of successfully implementing the IBDP in their classrooms along with their relationships to the GT students in their classes. The teacher participants explain situations detailing their interaction with GT students they have taught through their experience. These detailed descriptions provide the essence of the teachers' experiences teaching GT students in the IBDP classroom.

The graduate participants are all identified as gifted and talented. They all participated in GATE programs during their elementary school years. The graduates explain their experiences in a GATE program to serve as an identifier of giftedness in the participant. The graduates are successful recipients of the IB diploma following their high school graduation and are attending their first or second year in college. The receipt of an IB diploma serves as the success marker for persevering through the IBDP.

### Limitations

Limitations are parameters of the study that are not controlled by the researcher (Joyner et al., 2013). Limitations did arise during this study. The first noticed limitation is the quantity of declines to participate in the study. The numerous declines by school districts, principals and teachers may be indicative of the overall dissatisfaction or ignorance of the IBDP exhibited as a lack of desire to discuss the topic. One principal declined participation in this study due to the lack of benefit or profit it would bring to her school. Considering this limitation does raise a concern that only participants who are intrinsically vested in the program participated in this study.

All the participants did not participate with every data collection method. Three teachers did not attend the focus group, which resulted in a 60% teacher participation rate for the focus group. One teacher and one graduate did not complete the writing prompt activity, which resulted in an 80% participation rate for all participants sending in a writing prompt response. One graduate attended the focus group but had to leave half-way through due to a time conflict with prior engagements. The results may have differed if all participants had participated in every data collection method in this study.

#### **Recommendations for Future Research**

Several recommendations for future research as a result of this study are presented. As a result of the delimitations and limitations of this study, further research of the IBDP is recommended. Seven qualitative, prospective studies are presented. The results of this study reveal a need to research the differences and similarities of the DP with AP courses based upon the shared lived experiences of my teacher participants. 80% of the teacher participants taught AP courses prior to becoming an IBDP teacher and express the differences between the programs. A recommendation of a phenomenological study comparing the lived experiences of students and teachers of the IBDP in comparison to those in a school offering AP courses is suggested. The researcher recommends a quantitative study of the perceived satisfaction of IBDP teachers in comparison to AP teachers.

The IBDP is a well-organized, structured program that holds students and educators to high standards. The researcher recommends future studies of the IBDP. The first recommendation is a case study of the IBDP. Such a study would provide an in-depth look into the organization and the meaning behind the structure and high standards of the high school program. The researcher recommends a phenomenological study of IBDP administrators to explore insight concerning their responsibilities, expectations, and school atmosphere. A phenomenological study of IBDP teachers to explore the transition into teaching DP courses and the intrinsic and extrinsic rewards of being a DP teacher is recommended. The researcher recommends a case study of the role and responsibilities of the IBDP coordinator position in IBDP schools. The IB coordinator was an unexpected subtheme in the findings of my study. A look into the role of the IB coordinator would help unveil the importance and influences of that role to the school faculty and student body. Finally, a phenomenological study of non-gifted

students that successfully completed the program in comparison to gifted students is recommended. This study would explore the compatibility of the DP for students not identified as gifted and talented.

# **Summary**

The IBDP carries a reputation of rigor and prestige which is enticing to GT students desirous of rewarding challenges. By the time they reach high school, students identified as gifted are placed on an advanced academic track for their high school courses. These students know they are at a different academic level from other students. They require classrooms designed around higher-level thinking with teachers serving as mentor-guides teaching life learning skills. The reputation of the IBDP serves as a motivator for GT students to successfully complete high school through obtaining the prestigious IB diploma.

The IBDP provides an atmosphere where the students may be in the last two years of their high school but they are still moving forward with their career-life vision. The momentum of the IBDP is moving forward rather than traditional high school courses' view of winding down to completion at graduation. The DP sets students' focus on post high school graduation goals creating a perspective of graduation as being another steppingstone in life. The IB learning models encompass the whole student, which provides well-rounded, globally minded, students grounded in rigorous academia.

Both students and teachers experience rewards through the IBDP. The students may experience the importance of being a part of a community and having the ability to make change in that community, while completing the personal goal of high school graduation. DP teachers may reap intrinsic rewards teaching the subpopulation of GT students through implementing the

effective educational strategies of the IBDP, knowing they are investing into the future of society.

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# **APPENDICES**

#### **Appendix A: IRB Approval Letter**

# LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

January 12, 2018

Jeannie Marie Steelreed IRB Approval 3088.011218: Factors Influencing the Perseverance of Gifted and Talented Students from International Baccalaureate Diploma Programmes: A Transcendental Phenomenological Study

Dear Jeannie Marie Steelreed,

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

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

Sincerely.

Administrative Chair of Institutional Research The Graduate School



#### **Appendix B: Participant Consent Form**

### Participant Consent Form

You are invited to participate in a research study to discover contributing factors for successful gifted and talented students. This study is being conducted as a part of my Doctorate Degree in Curriculum and Instruction at Liberty University and will serve to fulfill my dissertation requirement. In this study, the researcher will explore the persevering factors for gifted and talented students to complete high school graduation in the International Baccalaureate Diploma Programme.

You are invited to participate in this research study because leaders in the school district where you graduated from an International Baccalaureate Diploma Programme recommended you. They acknowledged your achievement in the Diploma Programme and the recognition of your involvement with a gifted and talented education program.

**Title of Study:** Understanding Factors to Persistence of Gifted and Talented Graduates from International Baccalaureate Diploma Programmes: A Transcendental Phenomenological Study.

Principal Investigator's Name: Jeannie Marie Steelreed

**Background Information:** You are invited to participate in a qualitative study examining the factors leading to persistence of gifted and talented graduates from an International Baccalaureate Diploma Programme.

This research is being conducted by Jeannie Marie Steelreed, a doctoral candidate at the School of Education of Liberty University in Lynchburg, Virginia. If you have questions about this study, please contact Mrs. Steelreed at xxx-xxx-xxxx.

**Research Procedures:** As a participant in this study, you will be asked to participate in individual interviews with the researcher at a predetermined time and complete a writing activity in response to a writing prompt. The writing prompt is in the form of pretending to write a letter to high school sophomore considering joining an IBDP. Your letter will provide advice and helpful suggestions to this high school student concerning the achievement of success in the IBDP. The writing prompt will be completed at the participant's convenience and returned to the researcher in the provided addressed envelope via mail.

The interview will focus on your experiences in and out of school throughout your enrollment in an IBDP. Your identity will be protected, as will the responses to your interview questions. The interviews will take place at a local coffee shop or similar and will be approximately 30-45 minutes in length. The interviews will be recorded and transcribed to allow the researcher to analyze the data.

Following the interviews, the participants will be asked to participate in a focus group. If all participants can meet in one location such as a local pizza restaurant, the focus group will be

face-to-face. If any of the participants geographically cannot meet in person, the focus group will be conducted via conference software such as Skype for Business<sup>TM</sup>. Each participant will be sent an invitation link to join the group conference session. The session will be recorded to allow the researcher to analyze the data. The focus group will last approximately 30-45 minutes.

**Risks and Benefits of Participating in the Study:** The risks involved are considered minimal risks, which is no more than one would encounter when going about daily activities. The participants are not expected to receive any direct benefits.

**Compensation:** There is no monetary compensation for participating in this study.

**Confidentiality:** All participant data and information will be kept confidential and all participants will be assigned pseudonyms. The collected data will be kept either on a password protected computer or in a locked cabinet will access only to the researcher. This confidentiality ensures the responses of the participants will be protected. Each participant has the freedom to share data concerning their lived experiences of the phenomena being studied.

**Voluntary Nature of the Study:** Participation in this study is voluntary. The participants are free to decide to withdraw at any stage of the research without affecting your relationship with Liberty University or the researcher.

**How to Withdraw from the Study:** Your participation in this study is valuable to the researcher, however, circumstances may arise that would prevent you from continuing in this study. If this may occur, please email your request to withdraw to xxxxxxxx@gmail.com and I will respond within 24 hours with a confirmation that your participation in the data has been deleted from the data repository.

If you have any questions about this study, please email me at xxxxxxx@gmail.com. You may also contact my faculty advisor, Dr. Chris Bellamy at xxxxxxxxx@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraging to contact the Liberty University Institutional Review Board, 1971 University Blvd. Suite 1837, Lynchburg, VA 24515 or email at xxxxxxx@liberty.edu.

#### **Statement of Consent:**

I have read and understand the procedures of in this study.	of this study. I hereby give my consent to participate
The researcher has my permission to au participation in this study.	udio-record and video-record me as part of my
Participant Name:	Date:

#### **Appendix C: Graduates Open-Ended Interview Questions**

- 1. Please tell me a little about yourself. (Prompts: family, relationships, friends, likes and dislikes, life at college)
- 2. When did you first enter a GATE program?
- 3. Please describe your experiences in GATE. (Prompts: teachers, friends, activities)
- 4. Please describe your choice in attending an International Baccalaureate Diploma Program. (Prompts: friends, location, scholarship opportunity, accelerated classes)
- 5. Please describe your experiences in the IBDP. (Prompts: teachers, classmates, assignments, projects, grades, awards)
- 6. Please describe your view on learning.
- 7. What do you feel about the IBDP was most challenging to you?
- 8. Please describe classroom activities in the IBDP?
- 9. Please describe any challenges you may have experienced in the IBDP.
- 10. Please describe any supportive factors during your time in the IBDP.
- 11. What influenced your college choices?
- 12. What about your experience in the IBDP prepared you for college?
- 13. Please describe your transition to college.
- 14. Is there anything else you would like to share about your experience in the IBDP or your transition to college?

#### **Appendix D: Teachers Open-Ended Interview Questions**

- 1. Please tell me a little about yourself. (Prompts: family, relationships, friends, likes and dislikes, life at college)
- 2. How long have you taught in an IBDP?
- Please describe your experiences working in an IBDP. (Prompts: training, activities, workload)
- 4. Please describe your choice in working in an International Baccalaureate Diploma Program.
- 5. Please describe your view on learning.
- 6. What do you feel about the IBDP is most challenging for students?
- 7. Please describe classroom activities in the IBDP?
- 8. Please describe any challenges you may have experienced while working in an IBDP school.
- 9. Please describe any supportive factors during your time working in an IBDP school.
- 10. How have gifted and talented students responded in your IBDP classroom?
- 11. Please describe any supportive factors for gifted and talented students in an IBDP school.
- 12. What about your teaching experience in the IBDP prepares your students for college?
- 13. Is there anything else you would like to share about your experience working in an IBDP school?

# **Appendix E: Participant Writing Prompt**

Please write a letter giving your advice to a high school sophomore considering applying for their local IBDP.

#### **Appendix F: Focus Group Questions**

#### Graduates

- 1. What are the experiences you remember from your time in an IBDP that were engaging for you?
- 2. What are some positive factors about your teachers and how the classroom was handled?
- 3. Describe in detail the most engaging part of your high school experience, where you feel you learned the most.
- 4. How did your high school experience prepare you for college?
- 5. What other thoughts about your experience in the IBDP would you like to share that might help other gifted and talented students?

#### **Teachers**

- 1. What are some teaching experiences that stand out to you during your time teaching in an IBDP that created an engaging classroom atmosphere for GT students?
- 2. What are some positive factors of the IBDP in regards to teachers and classroom management?
- 3. Describe in detail an experience that you would say was the most engaging, where you feel the students learned the most.
- 4. How do you believe the IBDP prepares students for college?
- 5. What other thoughts about your experience in the IBDP would you like to share that might help other gifted and talented students or teachers of gifted and talented students?

#### Appendix G: Participant Recruitment Flier

#### LET YOUR VOICE BE HEARD!



## **DP TEACHERS: YOU ARE INVITED**

This is an opportunity for you to participate in dissertation research:

## Let your voice be heard!

Yes, you are a valued asset in the future of education. For my dissertation research, I am studying the Diploma Programme teachers of International Baccalaureate schools. I would love to tell your story. Following the completion of my dissertation, I will be presenting a copy to the IBO Foundation Office in Geneva, Switzerland.

Schedule an interview on my research website, by phone, or by email

https://sites.google.com/view/jeanniesteelreedresearch/home

jsteelreed@liberty.edu

Or

(702) 752-5338

JEANNIE STEELREED
DOCTORAL STUDENT AT LIBERTY UNIVERSITY

# THANK YOU

FOR YOU PARTICIPATION
PLEASE CHOOSE A \$25.00 GIFT CARD



Don't be shy

Let me tell your story your story!

Schedule your personal interview

Interview by:
Phone
Video Chat
In Person

This is your time to make a difference









