

Summer 2022

EXAMINING CAREER DECISIONS: EXPLORING THE INTEREST OF GIFTED GRADUATES ON WORKING IN EDUCATION

Alexandria K. Ryan
Southeastern University - Lakeland

Follow this and additional works at: <https://firescholars.seu.edu/coe>



Part of the [Adult and Continuing Education Commons](#), [Educational Assessment, Evaluation, and Research Commons](#), [Educational Leadership Commons](#), [Educational Psychology Commons](#), [Social and Philosophical Foundations of Education Commons](#), and the [Special Education and Teaching Commons](#)

Recommended Citation

Ryan, Alexandria K., "EXAMINING CAREER DECISIONS: EXPLORING THE INTEREST OF GIFTED GRADUATES ON WORKING IN EDUCATION" (2022). *Doctor of Education (Ed.D)*. 127.
<https://firescholars.seu.edu/coe/127>

This Dissertation is brought to you for free and open access by FireScholars. It has been accepted for inclusion in Doctor of Education (Ed.D) by an authorized administrator of FireScholars. For more information, please contact firescholars@seu.edu.

EXAMINING CAREER DECISIONS: EXPLORING THE INTEREST OF GIFTED
GRADUATES ON WORKING IN EDUCATION

By

ALEXANDRIA K. RYAN

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in Curriculum and Instruction

Southeastern University

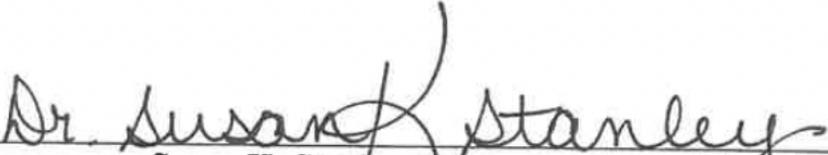
August, 2022

EXAMINING CAREER DECISIONS: EXPLORING THE INTEREST OF GIFTED
GRADUATES ON WORKING IN EDUCATION

by

ALEXANDRIA K. RYAN

Dissertation Approved:


Susan K. Stanley, Ed.D, Dissertation Chair


Janet L. Deck, Ed.D, Committee Member


Lisa A. Coscia Ed.D, Dean, College of Education

DEDICATION

This is dedicated to two of the most influential people in my life...

To my granny, Maxiene Ryan. My granny was the first person in my family to go to college. The magnitude of that will never be lost on me. I am so proud to say my granny was a nurse. I am even more proud to be her granddaughter.

To my mom, Elizabeth Ryan. My mom was the first person that I saw go to college. I remember how hard she worked, every single day. I love you so much!

ACKNOWLEDGMENTS

I would like to acknowledge my friends and family who still invited me to do things even though they knew I would likely say no because I had to write. Your friendship and love made (and still makes) all the difference!

Also, Dr. Stanley, who showed me and shared in the joy of teaching and research. I felt like we were kindred spirits the first time we talked. Your heart for students (of all types) is so clear in everything you do. Thank you for being on my team!

Abstract

Students who are gifted are often pulled in a variety of career directions because of their tendency to have many interests and passions. This study was designed to better understand the experience of adults who are gifted and their career choice. The purpose of this qualitative study was to explore what career paths adults who are gifted follow, specifically whether they choose to work in the education field or not. This phenomenological study explored four main themes in an individual who is graduated from a gifted education program's life: Gifted Program Experience, Career and Interests, Family Influence, and Social Emotional. The themes were derived from reoccurring ideas and categories from the interviews of 20 adults, over the age of 18, who graduated from a gifted education program. This study was based on Gardner's theory of multiple intelligences. Results from the study revealed participant interest or participation in nontraditional teaching or education in their chosen professional field. The results of this study could illuminate the interests and intent of individuals who are gifted and their career choices.

Keywords: student who is gifted, gifted education, vocation, career decisions, adult who is gifted, education, phenomenology

TABLE OF CONTENTS

Dedication.....	iii
Acknowledgments	iv
Abstract.....	v
Table of Contents	vi
List of Tables.....	x
I. INTRODUCTION.....	1
Background of the Study	1
Theoretical Foundation.....	5
Problem Statement.....	6
Purpose Statement	8
Overview of Methodology	8
Research Questions	9
Research Design	9
Data Collection.....	9
Procedures	10
Overview of Analyses	10

Limitations.....	11
Definition of Key Terms	11
Significance of the Study.....	12
II. REVIEW OF LITERATURE	13
What is Giftedness?	13
Training and Education of Teachers for Students who are Gifted	16
Identifying Students Who are Gifted.....	19
Gifted Education Facilitation	23
Gifted Education Funding	33
Individuals who are Gifted and the Workforce	34
Summary.....	36
III. METHODOLOGY	38
Description of Research Design	38
Participants	39
Role of Researcher	43
Measures for Ethical Protection	43
Research Question	43
Data Collection	44
Procedures	44

Data Analysis.....	46
Summary.....	47
IV. RESULTS.....	48
Methods of Data Collection.....	48
Findings by Research Question	48
Themes	49
Careers and Interests	53
Family Influence.....	59
Social Emotional Influence	62
Summary.....	66
V. DISCUSSION.....	67
Methods of Data Collection.....	67
Summary of Results	68
Discussion.....	68
Research Question	75
Study Limitations	75
Implications for Future Practice	75
Recommendations for Future Research.....	76
Conclusion.....	77

References	78
Appendix A	86
Appendix B.....	87

LIST OF TABLES

Table	Page
Table 1: <i>Participants, Career Field, and Gender</i>	40
Table 2: <i>Participants and Type of Educator Role</i>	42
Table 3: <i>Participants with STEM Careers</i>	55
Table 4: <i>Participants who are Traditional Educators</i>	57
Table 5: <i>Participants who are Nontraditional Educators</i>	58

INTRODUCTION

Students who are gifted are faced with many opportunities to use their skills and talents in their education and after graduation. Gifted programming creates access to resources, rigor, support, and enrichment designed to guide and prepare this unique group of students to lead fulfilling and meaningful careers. Students who are gifted are often encouraged to pursue careers in prestigious fields, yet are not often encouraged to pursue careers in education. Qualified, talented, empathetic, and passionate teachers are in high demand to teach, enrich, and inspire the next generation. Adults who are gifted are needed in education because of their specific experience and perspective, as well as their unique abilities they can pass on to their students.

This body of work describes a phenomenological research study of the career interests of graduates of gifted programs, specifically how their experiences in a gifted program led them to include or exclude a career in the field of education.

Background of the Study

Kitsantas et al. (2017) studied the perceptions of students who are gifted, specifically their views of gifted programs. The researchers wanted to understand how elementary and middle school students who are gifted perceived themselves and their growth in the context of their gifted program or education. The Kitsantas et al. phenomenological study used focus groups and interviews from elementary and middle school students who are gifted. Teachers and administrators from each school randomly selected 34 students from grades 3, 4, and 5 to

participate. Information gathered was coded and organized into main ideas or overarching themes and subthemes. These themes included academic needs (differentiation, challenge, depth, and self-regulation), socioemotional needs (appropriate peers, peer challenge, and enjoyment), and instructional needs (challenge, choice, and presentation). Implications of the study suggested students who are gifted are aware of their need for specific gifted programming; additionally, educators should use feedback from students to drive instruction and experience.

Gifted education is not required in all states and school districts. The majority of states provide gifted services to students; North Dakota relies on school districts to determine whether or not gifted services are provided (Rinn et al., 2020). Callahan et al. (2017) studied the implementation of state policies in gifted education. One thousand five hundred sixty-six school personnel, including teachers, specialists, and principals from across the United States were surveyed. The survey included Likert-scale-style questions with a 95% confidence interval and 3% margin of error. Data were composed of question scale results of elementary, middle, and high school employees on different gifted education subcategories. Data were analyzed by two team members to determine reoccurring themes and ideas, which were then categorized to reflect overarching themes. All open-ended questions and answers were categorized by the researchers as a team. Callahan et al. (2017) showed elementary and middle schools are more likely than high schools to have a gifted program for students who are identified as gifted. However, high schools are more likely to have a range of options for rigor of courses. The researchers suggested that as students age, the emphasis on gifted education focuses more on challenge rather than enrichment and exploration. Further, students who are gifted are limited to the coursework available to them in their school, district, or partnerships with the school and school district.

The gifted individual's experience is complex and unique. Students who are gifted are formally released from educational services, such as enrichment or educational consultation, after the completion of their academic career. Research on the gifted perspective becomes limited after students graduate (Brown et al., 2020). Brown et al. surveyed 76 gifted adults from 14 different countries to compile a comprehensive narrative to explain how adults who are gifted thought the field of gifted research should be expanded. Researchers conducted three rounds of open-ended questionnaires and completed a thematic analysis after each data collection point by grouping common feelings and phrases together to determine overarching themes and ideas, including individuals who are gifted were aware their experiences were unique to their group. Adults who are gifted felt more research needed to be done in the field to expand the knowledge of the multifaceted and complex life experience of being an individual who is gifted.

Students who are gifted are more likely to be expected to attend college or a post-secondary education program than their general education peers (Meyer et al., 2021). Meyer et al. determined that students who are gifted felt pressure not only to pursue a high paying and prestigiously-viewed-by-society career, but also to attend a college or university with a reputation of high achievement. Through semi-structured interviews with 10 high school students from Texas, Meyer et al. found students who are gifted felt pressure from family members and peers regarding college and career choice. Qualitative data were analyzed by classifying codes into major themes. Major themes that emerged from the study were pressure on students from peers, teachers, and family members and the need for exploration or job experience.

Ozcan (2017) described the process of students who are gifted thinking about and choosing a career. To explain the process, 11 Turkish high school students who were identified as gifted participated in a semi-structured interview. Interview questions were created through

the synthesis of reoccurring issues in relevant educational literature and through consultations with counselors, assessment specialists, and teachers. Interviews were recorded and transcribed. Data were analyzed by identifying common participant statements. Ozcan found through researcher-led semi-structured interviews, the occupation preferences of students were based on the students' cultural beliefs and impressions. Students were mostly likely to be interested in science and medicine careers. Education and humanities-based careers were not mentioned by the students. The researcher concluded the lack of interest in education and humanities-based careers showed certain careers people of the student's home culture valued. The perceived prestige and importance of science and medicine in the Turkish and global culture was emphasized.

A family's socioeconomic status can also influence the career choices of students who are gifted. Jung and Young (2017) explored the career-making decisions of low-income students who are gifted. The researchers interviewed 26 Australian students who are gifted, and who came from low socioeconomic families. These students were in grades seven through nine. The researcher created interview questions, participants were interviewed by two individuals, and data were collected and coded for overarching themes and ideas. The themes which emerged from the study were types of motivation, view of opportunities, and unique individual perspectives. This grounded theory study addressed how low-SES students who are gifted viewed the variety of opportunities available to them, as compared to some students who are gifted who struggle with decision fatigue. Researchers concluded family members of low-SES students who are gifted were the main sources of motivation, as opposed to cultural beliefs or money.

Jung and Young (2017) examined the process of career decision-making and motivation in teenagers who were identified as gifted. Jung and Young surveyed 664 Australian high school students who are gifted from three academically selective high schools. The independent variable was decision making, and the dependent variable was complications of the decision-making process. The researcher designed a survey using demographic short answer questions and Likert-scale-style questions. Using a multiple-regression-style analysis, Jung and Young concluded that students who are gifted may struggle with career decision making due to perfectionism, general indecision, and multipotentiality ($\alpha = .78$). The results of this study implied that early detection of career avoidance or amotivation may help school professionals in counseling students who are gifted and relieve some stress from students who are gifted concerning career and future choices.

Theoretical Foundation

Students who are gifted are uniquely talented in one or more areas (Tomlinson et al., 2009). Howard Gardner developed the idea of multiple intelligences in his 1983 work *Frames of Mind: The Theory of Multiple Intelligences*. Individuals may have a unique collection of intelligences which make them excel in certain areas. Based on the presence of multiple intelligences in students and adults who are gifted, Gardner's theory of multiple intelligences served as an appropriate framework for the present study.

Gardner (1983) addressed the importance of looking beyond traditional academic talents to create a multidimensional image of intelligence. Gardner argued for a variety of intelligences beyond traditional general intelligence, such as spatial, naturalist, bodily kinesthetic, musical, linguistic, intrapersonal, interpersonal, and logical-mathematical. Gardner identified linguistic and logical-mathematical as the most traditional or academically aligned forms of intelligence. Students who are gifted, once seen as only the academically high-achieving students, are now

seen as multitalented and multifaceted individuals (Kitsantas et al., 2017). Gardener suggested that intelligence was not only knowledge and skill, but also the potential of the knowledge and skill. In the context of this study, the potential could be seen as a calling, vocation, or career aptitude and choice.

Some students who are gifted struggle to choose their career or education paths because of multiple passions, interests, or areas of talent (Ozcan, 2017). The theory of multiple intelligences can explain why students who are gifted struggle with decision fatigue when choosing a career path. They may also feel pressure from family and other external forces to enter a certain field because of a perceived talent or cultural norm (Smith & Wood, 2020). Other students who are gifted, particularly students who are gifted from low-income families, view their variety of talents as multiple opportunities to succeed in their careers (Jung & Young, 2017). Applying the framework of multiple intelligences to gifted education and career choice for students who are gifted expands the idea of many talents and skills leading into career opportunity and choice

Problem Statement

Gifted education is traditionally intended for students with an IQ of 130 or above (Flanagan & McDonough, 2018). Presently, gifted education is intended to serve students with a high IQ and asynchronous development of skills and talents compared to their peers (Callahan et al., 2017). These students are often considered the best and brightest by peers, teachers, and education officials. Students who are gifted often have more than one exceptionality that makes them stand out from the average student. Common exceptionalities include an inclination towards math, strategy, spatial thinking, linguistics, leadership, and empathy (Kitsantas et al., 2017).

Students who are gifted are often led, or pushed, into high paying or high achieving careers, such as being a doctor, lawyer, or engineer (Sahin & Yildirim, 2020). These complex and talented students are usually encouraged to pursue careers outside of education (Boroughf, 2021). Understanding the relationship between students who are gifted and their career choice, specifically choosing to work or not work in the education field, is essential in furthering the research surrounding the gifted experience in vocational decision making.

In countries where teachers are seen as respected and prestigious professionals, low-, average-, and high-achieving students reported having interest in the profession (Ozcan, 2017); however, in countries where teaching is not considered as prestigious, low- and average-achieving students are more likely than high-achieving students to report interest in working in the education field (Han, 2018). Students who are gifted report struggling with too many options and often look to trusted figures in their lives to help them narrow their career options (Smith & Wood, 2020).

To best explain the phenomenon of students who are gifted being urged away from the education profession, individual stories and common experiences of career decision-making need to be shared. Gaps exist in the study of adults who are gifted (Brown et al., 2020). The majority of research surrounding individuals who are gifted focuses on K-12 school age individuals. The lack of research including adults who are gifted suggests more research is needed to understand the life stages of individuals with exceptionalities.

Many states are currently in a teacher shortage. The teacher shortage results in unqualified teachers being hired to educate young and developing minds. By using reflections from adults who are gifted and choose not to pursue the education profession, society can begin

to shift the narrative and perspective of the student-who-is-gifted to educator-who-is-gifted pipeline.

Purpose Statement

The purpose of this phenomenological study was to explore the career decisions of graduates of a gifted program. An individual who is gifted is described as an individual with a high IQ and unique talent or capability beyond the peer group (Callahan et al., 2017). Traditionally, a high IQ test score is classified as a score of 130 or higher (Kermarrec et al., 2020). For the purpose of this study, a unique talent or capability was defined as skill or talent developed at a rate asynchronous to peers (Morelock, 1996).

Overview of Methodology

A qualitative approach to this research produced a holistic view of the experiences of graduates of gifted programs. The research included graduates of gifted education programs, including graduates of gifted enrichment pullout programs, gifted cluster classes, and graduates who are gifted, receive consultation services from a gifted-endorsed teacher. Furthermore, all participants received gifted services in the United States through a public or private school setting. Study participants in this phenomenological research all shared the experience of being identified as a student who is gifted, participating in gifted education services, and having a minimum of a high school education.

This phenomenological research was conducted through semi-structured interview questions. Interviews were an appropriate data collection due to the use of purposeful sampling and gathering open-ended data (Creswell & Poth, 2018). Interviews with graduates of gifted programs were conducted to further understand the experiences of these students and their experiences in choosing a career path or vocation.

Research Questions

The driving question for this research was:

As a graduate of a K-12 gifted enrichment program, how did your experience in a gifted education program encourage you to include or exclude the education field as a career path?

Research Design

Phenomenology was chosen for this study to detail the shared experience of graduates of gifted programs when choosing a career path and why they felt pulled away from the field of education. This type of qualitative study uses a smaller sample size to deeply understand the thoughts, feelings, and experiences of a specific group of people who have a shared experience (Creswell & Poth, 2018). In this case, the shared experience is the participation in and graduation from a gifted education program.

Study participants included individuals who were identified as gifted prior to graduating high school. The participants were over the age of 18 and high school graduates. Participants did not need to be currently employed to participate. Participants' identities were protected by using pseudonyms. The participants and the researcher interacted through Zoom-recorded interviews.

Data Collection

Participants were recruited via social media, specifically through Meta's Instagram and Facebook platforms. After being screened for qualifying factors, 10-15 participants from a variety of ages and backgrounds were interviewed by the researcher. Participants were graduates of a gifted program and over the age of 18. All interviews were recorded on Zoom and transcribed using the program Otter.ai. Interviews lasted no more than 30 minutes. The researcher then analyzed the transcripts for overarching themes and ideas.

Procedures

Prior to collecting data, an interview guide and informed consent form were created, and a research application was submitted to the Southeastern University's IRB. After IRB approval, participants were recruited. Participants were to be recruited using the Instagram and Facebook social media platforms over a two-week period. The participants were over the age of 18 and graduates of a gifted program. Eligible individuals who were interested submitted their email address via Google Forms. After the recruiting period, the participants were contacted to schedule a Zoom interview through the Calendly application. Interviews were recorded on Zoom and transcribed using Otter.ai. All data were, are, and will be kept in a secure, password-protected file on a password-protected computer for 5 years and will then be permanently deleted.

Overview of Analyses

After completing interviews with the participants, the researcher transcribed all video audio using Otter.ai. Using the transcribed scripts, the researcher read through the text, made notes, and started to identify phrases and themes which reappeared in multiple interview sessions. The researcher color coded different occurring phrases, ideas, and themes. Staffing team impact was highlighted in blue; current job or education was highlighted in yellow, including science, technology, engineering, and mathematics (STEM) career involvement in bolded letters; mention of teaching or working in education was green; family influence was highlighted in red; and socioemotional takeaways were highlighted in pink. Any overlapping themes or ideas were highlighted in both colors. Further coding passes were organized using handwritten notes and Microsoft Excel to organize ideas and phrases by speaker, category or categories, and theme.

Limitations

The limitations for this study were minimal. Due to inconsistent identifying procedures, there were a disproportionate representation of individuals who were reported as gifted versus individuals who are gifted but not identified. The disproportionate representation of individuals limited the sample, as some individuals who should have been identified as gifted were not identified. Other recruiting limitations included lack of participation in the study due to lack of interest, scheduling, or other prohibiting factors. At the time of this research, COVID-19 was also a limiting factor.

Definition of Key Terms

The following words and phrases are key terms for the study.

- **giftedness:** Current literature proposes an individual is considered gifted if they have an above average or high IQ and asynchronous development of skills and talents compared to their peers (Callahan et al., 2017).
- **gifted education program:** A gifted education program is defined as an enrichment or advanced program for students identified as gifted. A gifted education program may include a pull-out enrichment class, a gifted and high-achieving clustered class, differentiation in the general education classroom, or a consultation program (Rinn et al., 2020). A gifted education program should have a specific process for identification of students who are gifted (Callahan et al., 2014).
- **high IQ:** High IQ is defined as an intelligence quotient test score over 130.

Traditionally, a student is considered gifted if they earn a score of 130 or higher on the Wechsler Intelligence Scale for Children (WISC) test, with a standard deviation of 15 points (Flanagan & McDonough, 2018).

- **traditional educators:** a traditional educator is an educator who teaches in a K-12 setting.
- **nontraditional educators:** a nontraditional educator is a professional in their respective field who teaches or mentors specifically in that field.

Significance of the Study

Adults who are gifted are a unique group that are researched less than children who are gifted (Brown et al., 2020). A better understanding of the career paths of adults who are gifted can move the field of gifted education forward by understanding what these adults value in a career. Moreover, adults who are gifted are needed in education to support students who are gifted academically, emotionally, and socially. This research contributed to the body of knowledge regarding high school graduates who participated in a K-12 gifted program and how they included or excluded education from their career choice. Chapter 2 addresses current practices in identification and the education of students who are gifted, as well as career development practices.

II. REVIEW OF LITERATURE

The purpose of this phenomenological study was to explore the career decisions of graduates of a gifted program. An individual who is gifted is described as a person with a high IQ and unique talent or capability beyond the peer group (Callahan et al., 2017). Traditionally, a high IQ test score is classified as a score of 130 or higher (Kermarrec et al., 2020). For the purpose of this study, a unique talent or capability is defined as skill or talent developed at a rate asynchronous to peers (Morelock, 1996).

What is Giftedness?

Traditionally, a student or individual was considered gifted if they received a score of 130 or higher on the WISC (Kermarrec et al., 2020). The literature supports the concept that a student who is gifted is defined as a student with unique talents and abilities beyond their peer group. The National Association for Gifted Children (NAGC, 2013) referred to students who are gifted as “students with gifts and talents [who] perform – or have the capability to perform at higher levels compared to others of the same age, experience, and environment in one or more domains” (p. 1).

Renzulli’s Three Ring Conception of Giftedness

Joseph Renzulli developed the three-ring conception of giftedness in 2005 to identify students who were gifted based on his research of individuals who appeared to be gifted. He suggested intelligence testing was not the ideal way to measure intelligence, and IQ scores may

not represent all factors of intelligence. Renzulli (2005) emphasized the importance of different types of intelligences, much like Gardner's theory of multiple intelligences. The three-ring conception of giftedness approach took the emphasis away from traditional IQ, and other test scores, by placing the focus on other qualities, which established a more holistic view of a gifted individual.

The three rings of the three-ring conception of giftedness are made up of above-average ability, creativity, and task commitment (Renzulli, 2005). A combination of the rings would present giftedness in an individual. Above-average abilities refer to an individual's ability to process information at a rate and depth greater than one's peers. According to Renzulli, creativity is understood as novel ideas, flexibility, openness, and sensitivity to experiences. Task commitment is the ability for an individual to motivate oneself to persevere working diligently with curiosity and determination.

Gagné's Differentiated Model of Giftedness and Talent

Gagné developed the differentiated model of giftedness and talent (DMGT) in 1999. The main difference between Gagné and other educational theorists, such as Robert Sternberg and Joseph Renzulli, is that he believed that giftedness and talent were two separate designations. According to Gagné, giftedness is the expression of a natural talent in at least one area. Intellectual, creative, socioaffective, and sensorimotor are the four main domains of giftedness. For an individual to be considered gifted by DMGT standards, the person must demonstrate their ability and be considered in the top 10% of peers in that area. Talent, on the other hand, is similar, yet mastered through the development of skills and "emerge[s] progressively" (Gagne, 1999, p. 230). A form of giftedness can become a talent with a mixture of environment, intrapersonal connections, and chance.

Sternberg's Theory of Successful Intelligence

Sternberg's theory of successful intelligence (1998) was based on the interaction of an individual's intelligence with their own environment. The augmented theory of successful intelligence purports that students may not be able to express their intelligence through the assessments given or products expected; however, the lack of expression does not mean the student is not intelligent. The lack of expression might mean the student was not assessed in a way to demonstrate strengths (Sternberg, 2011). Individuals can be considered successfully intelligent by recognizing their own strengths, finding and participating in appropriate environments, and balancing their individual variety of skills and talents. Identification of students who are gifted should include who will be able to take advantage of the advanced learning opportunities. Education professionals who identify students who are gifted and work with those same students should be advised to remember success may look different to each individual they support.

Hollingsworth and Special Perplexities

Hollingsworth (1949) began to study students who were gifted after looking for a comparison case study for preservice students studying young students with learning impairments in 1929. Hollingsworth believed students who were gifted were usually ignored by society because the focus on educational research was to understand students who were not in tune with societies' social expectations. Educators of the time did not see students who were gifted as "socially annoying"; however, they [students who were gifted] were seen as "restless" (Hollingsworth, 1949, p. 1). Hollingsworth advocated to better understand students'-who-were-gifted mental age and their asynchronous social development. She encouraged educators, and those around individuals who are gifted, to be encouraging and helpful, as opposed to the

“malicious and jealous people who are likely to persecute those who are formally identified as unusual” (Hollingworth, 1949, p. 1). Throughout her career, Hollingworth developed a list of perplexities of and concerns for students who were gifted, which may help others identify individuals as gifted if displayed: finding appropriate and interesting academic work, getting along with other children and adjusting to others proclivities, becoming hermits, developing as leaders, avoiding negative views of authority, avoiding manipulation of others, conforming to rules and society’s expectations, and understanding their purpose in life. Hollingworth also showed special concern for female students who were gifted.

Training and Education of Teachers for Students who are Gifted

According to the National Association of Gifted Children’s *State of the States in Gifted Education* (Rinn et al., 2020), teacher training for teaching students who are gifted is not required by 18 states. Twenty-six states require a certification or endorsement. Four states require graduate-level work in gifted education. Three states, which include Iowa, Maine, and Virginia, require undergraduate coursework related to gifted education for preservice teachers and education majors. Additionally, prior to the dissolution of gifted education in 2021, the state of New York required 50 hours of supervised teaching of students who are gifted (LearnDOE, n.d). The state of Texas requires teachers to participate in 30 hours of professional development for gifted education to earn a gifted and talented endorsement. Further, teachers of the gifted in Texas must participate in 6 hours of specific gifted and talented professional development to maintain the credential (Texas Association for the Gifted & Talented, n.d.).

NAGC Teacher Preparation Standards

NAGC created *Teacher Preparation Standards in Gifted Education* in 2013 to help direct states on how to train teachers of gifted students (NAGC & CEC, 2013). The standards are meant

to drive curriculum and instruction and the undergraduate and graduate level of teacher preparation programs. The focus of each of the seven standards is on the “beginning gifted education professionals” (p. 1). The standards of professional competencies to support gifted enrichment in the classroom are including backgrounds and culture of students, multiple means of learning and assessment, professional knowledge development, and collaboration with stakeholders in gifted education.

The first standard emphasizes the importance of the educator understanding the culture and background of the student who is gifted. This background includes the student’s language, culture, family experience, and individual needs to create an environment in which the student can progress and learn to their greatest ability (NAGC & CEC, 2013). Educators who teach students who are gifted should be aware of the basics of typical human growth and development, as well as how exceptionalities can influence asynchronous development. Physical and mental development both influence the learning process of the individual who is gifted.

Standard two suggested educators should create “safe, inclusive, and culturally responsive environments” for their students ((NAGC & CEC, 2013, p. 2). Standard two also emphasized the importance of a "continuum of services” for students that includes academic and social education (p. 2). Beginning educators of individuals who are gifted should prioritize working with a variety of students and other educational professionals to build a well-rounded teaching practice. Finally, standard two stated beginning gifted education professionals should create environments to encourage self-development, for example self-awareness, self-regulation, and leadership.

Standard three focuses on the educator’s knowledge of the general education and specialized curriculum used in gifted education. Students who are gifted may have many

different interests and levels of knowledge in different subjects. Educators of the gifted should be prepared to use formal and informal assessments to “select, adapt, and create materials” (NAGC & CEC, 2013, p. 3). Teachers should select appropriate material for their students to use which will encourage creativity, promote acceleration, and add depth and complexity to content.

Standard four is *Assessment*, focusing on using strength-based assessments to minimize bias and highlight student abilities. This standard also focuses on the identification of students who are gifted (NAGC & CEC, 2013). Staffing teams should be vigilant in removing former biases during the identification process and placement decision-making to ensure that students who need services are receiving services. Beginning educators, focusing on standard four, should use assessment results to create short-term and long-term instructional goals and plans. Finally, educators should regularly monitor students’ progress and goals throughout learning, adjusting when needed.

Instructional planning and strategies is standard five. According to standard five, educators should be aware of and use evidence-based instructional strategies to support students in creative and critical thinking. Instructional time should include opportunities for students to “explore, develop, or research their areas of interest or talent” (NAGC & CEC, 2013,p. 6). Through standard five, the NAGC and CEC suggested the use of relevant and age-appropriate technology in the classroom to support students learning.

Professional Learning and Ethical Practice is standard six. Beginning educators in the field of gifted education should use professional ethical principles at all times to guide instruction and professional development. Gifted education is complex and unique. Educators should be aware that gifted education is evolving and developing as more research on the area becomes available. The role of the educator in gifted education reaches far beyond the

classroom. Educators in gifted education should “promote and advocate for the learning and well-being of individuals with gifted and talents” (NAGC & CEC, 2013,p. 7).

The final standard is *Collaboration*. Collaboration focuses on the educator working with families, educators, and other gifted education stakeholders in the community to support students who are gifted in the classroom. Collaboration in-person and through technology-based communication has created opportunities for professionals to connect and develop learning experiences based on best practices and experiences. Colleagues can serve as a resource to beginning teachers and experienced teachers to “promote the well-being of individuals with gifts and talents” (NAGC & CEC, 2013, p. 7).

Identifying Students Who are Gifted

The general process for identifying students who are gifted involves a teacher- or observer-created checklist, a screening exam, and an intelligence test before being placed. Traditionally, students who are gifted were seen as high achievers and students that earned straight A’s. More currently, educators and support staff are starting to acknowledge students who do not fit the typical high-achiever mold.

State Identification

Students who are gifted may be identified by nationally set IQ or achievement scores; for example, students in Florida or Oklahoma are considered gifted if they score a certain IQ score or score in a high percentile nationally. Florida considers an IQ score of 130, with a standard deviation of 15 points, eligible for gifted education services (FLDOE, 2017). Some states, such as New Jersey, Illinois, and Arizona, use state or local norms to determine which students are gifted (Arizona State Legislature, n.d.; Illinois General Assembly, 2005; New Jersey Department of Education, 2018). In the state of Florida, once a child is identified as gifted, they are to receive

gifted services. Students identified in other states but have moved to Florida are included in gifted services (FLDOE, 2017).

During the 2018-2019 school year, eight states reported using a universal screening test to identify students who may be gifted. Universal screening tests remove some subjectivity from the identification process and are more likely to identify students who may not have otherwise been identified. States have also focused on making professional development available to educators to provide training and support in identifying students who may be gifted (Rinn et al., 2020).

Underrepresented Populations in Gifted Education

The NAGC has outlined several clarifying statements concerning the identification of students who are gifted. Students who are gifted come from racially diverse backgrounds, require access to appropriate education, may have learning or processing disorders that require further support, and they may need specific support and guidance socially and emotionally. The NAGC (2019) standards also stated that students who are gifted may need changing supports through their academic career. Some states have programs in place to help identify under-represented populations in gifted education. Colorado and Wisconsin use alternative pathways with a focus on gifted abilities in areas other than norm-referenced tests, such as leadership, creativity, and product evaluation to identify students in need of gifted (Rinn et al., 2020).

Gifted identification approaches are generally not sensitive to the culture or socioeconomic status of the student. Teacher identification checklists and norm-referenced tests are known to exclude students of minority cultures due to students' life experiences and exposures (Grissom et al., 2017). Using two years of data collected from the *Civil Rights Data Collection* and the *Schools and Staffing Survey*, as well as data from the *Common Core of Data*,

Grissom et al. (2017) focused on public elementary schools, specifically noncharter and nonmagnet schools. Two thousand one hundred seventy schools served as the sample. The independent variable for this study was the race of teachers and principals. The dependent variable was the presence of different ethnicities of students in gifted programs. The researchers used regression models to determine students of a minority ethnicity are more likely to be identified as gifted if the teachers and principal of their school are from a minority group.

Tran et al. (2022) found, through logistic regression, Arkansas elementary students were 50% less likely to be identified as gifted if they participated in the free and reduced lunch program and were from a low socioeconomic status. Tran et al. compared 3,992 third-grade students who scored in the top 5% of math and reading assessments to five independent groups of third-grade students and determined that 30% of students in the top 5% were not identified as gifted. Tran et al. suggested using state reading and math assessments as initial screening tests to identify students who may need additional gifted enrichment or acceleration.

In the state of Florida, students who qualify for free and reduced lunch have a second option of being identified as gifted: Plan B. Rather than scoring 130 on the WISC, these students are able to be identified as gifted with a score of 120 and a teacher/observer check list. The Plan B program was designed to compensate for lack of access to early childhood education (FLDOE, 2017). Ayoub et al. (2021) found that students who are gifted from families of a low socioeconomic status who are supported appropriately in the classroom, as well as at home, are more likely to be academically successful than peers that lack one or the other support. One hundred forty-two Egyptian middle school students were randomly selected from 10 schools. Students were administered a survey created by the researchers to better understand the types of

supports for gifted students in rural areas. Multiple regression showed the biggest impact from support on the students' academic success was environmental, social, and psychological.

Twice Exceptional Students

Some students who are suspected to be gifted may also have a learning disability or learning challenge. Students who are identified as gifted and have a learning disability are referred to as being *twice exceptional*, due to two types of educational exceptionalities separating these students from their general educational peers. The NAGC has made a public statement encouraging students who are suspected of being twice exceptional to be tested for gifted education by using the WISC-V or another set of tests to document “diverse strengths” these students may possess, ensuring that children with disabilities have access to gifted enrichment (NAGC, 2018, p. 1).

The No Child Left Behind Act (NCLB) of 2001 was created to close achievement gaps nationally. Under NCLB, states were required to test all eligible students in math and reading from 3rd through 8th grade, and then once again in high school. Each state was required to report adequate yearly progress through test data. The test data were also used to make informed curriculum and placement choices for students, including invention services, such as gifted enrichment (NCLB, 2003).

In a qualitative study concerning parents of students who are twice exceptional, Mun et al. (2021) found that parents of students who are twice exceptional feel as though the students are supported in their disability but “left behind” in their need for gifted services (p.554). Mun et al. conducted a qualitative study using focus groups comprised of 39 parents. Parents were invited to participate in focus groups through the school their child was enrolled in. This study

was conducted as part of a larger, overarching study completed to better understand the student and parent population of the school district.

Mun et al. (2021) concluded that many parents of minority students, including those who were twice exceptional, struggle with understanding and being part of the gifted identification process. The identification process may include classroom observations, timelines, and what types of testing are being administered for identification. Mun et al. also found that parents of elementary school students felt like they had better school and gifted program communication than parents of middle and high school students.

Gifted Education Facilitation

Gifted enrichment can be facilitated in a variety of different ways. Students most likely received gifted services through a pull-out class, a push-in facilitator, a clustered class, advancement/acceleration, or a consultation service (NAGC, 2018). Each service can meet a student's gifted education goals, while also encouraging appropriate social and emotional development. According to the NAGC, students are more likely to receive gifted educational services in elementary school than any other school level. The majority of students receiving services are in grades 3- 5 or upper elementary. Gifted services in secondary schools usually involve honors, Advanced Placement, and dual enrollment. Dual enrollment allows students in high school to participate in college-level courses for college credit. In West Virginia, students only receive gifted services at the high school level if they are identified as profoundly gifted (West Virginia, Policy 2419).

Pull-Out Classes

Pull-out classes usually occur daily or weekly and involve students meeting with a gifted-certified teacher. These programs are usually more flexible than a general education curriculum

and can be tailored to the specific needs of the students in the pull-out class (Hornstra et al., (2017). Hornstra et al. conducted a longitudinal quasi-experimental study. Forty-five classes made up of 4th, 5th, and 6th grades participated. Seventeen classes, made up of 428 students were from general education classrooms. Fourteen classes, made up of 218 students, were full-time high-ability classes. The final 14 classes, made up of 245 students, were part-time high-ability classes. The students in the part-time high-ability class participated in gifted services one day a week at a different school campus. The rest of the week they attended their usual school. Prior to the school year, students were given the *Scholastic Cognitive Abilities Test (NSCAT)* as well as the *Achievement Emotions Questionnaire (AEQ)*. Students who participated in a part-time program were administered the *AEQ*, given slightly modified questions, such as “How do you feel about lessons at [program]?” The rest of the students were given questions regarding their school. The *AEQ* included items regarding enjoyment, pride, hopelessness, boredom, and negative activating emotions. From the same study, Hornstra determined students who participated in pull-out classes were generally more bored in their general education class than nonadvanced peers.

Van Rossen et al. (2021) studied 674 4th, 5th, and 6th grade students from nine different primary schools in the Netherlands. Four hundred twenty-nine students were from general education classes, and 245 students participated in a gifted enrichment pull-out program. Students participating in the pull-out program attended their general education class four days a week and one of three different enrichment programs one day a week. All programs focused on creative and critical thinking. Schools were randomly selected and invited to participate; however, due to lack of interest, schools were recruited through their connection with the pull-out programs. Data were collected at three points during the year: the beginning, middle, and

end. To understand the perceived relationships between students and teachers, as well as between students, students completed an existing scale measuring *Relationship with Peers* and *Relationship with Teachers*. Students participating in the pull-out programs completed the assessment twice, focusing on both of their academic institutions. Van Rossen et al. concluded pull-out classes allow students who are gifted to interact with other students who are gifted who may be in a different class, grade, or even school, giving them a unique opportunity to form community with similar students. The opportunity to build community and develop strong relationships between like-minded peers can create a positive classroom experience for individuals who are gifted.

Classroom Services

Opposite of pull-out classes, some school districts implement in-class small groups for students who are gifted. In the classroom, students who are gifted may participate in a variety of learning models and instructional strategies to best meet their learning needs. Push-in facilitators teach a small group lesson in the students' general education classroom, while the rest of the class is receiving instruction from the general education teacher. In some schools and school districts, the classroom teacher may provide gifted services for students through differentiation and ability grouping.

Clustered Classes

If a school or grade level has enough students to divide grades by ability level, students may get the opportunity to participate in a clustered class, a class of students who have similar perceived ability and standards mastery. In the case of a gifted education program, a clustered class may have students who are gifted, as well as students who are high achieving. The Preckel et al. (2019) study was part of a larger project which aimed to study academic achievement and

motivation in grades five through seven. Data were collected through a German ability grouping school. Nine hundred twenty-two students were tested twice in fifth grade, once in sixth grade, and once in seventh grade. Students were administered the *Academic Self Concept (ASC)*, as well as the *Cognitive Ability Test for Grades 4-12*. Parents of the participants were also surveyed about their highest level of education, including an open response to include their perspective. All participation was voluntary, and students had to have parent permission to participate. Preckel et al. concluded both students who are gifted and students who are high achieving can benefit from extra advancement and enrichment opportunities, as well as social development with like-minded peers.

Advancement or Acceleration

Advancement or acceleration may look like early entrance to school (grade school or college) or grade skipping. Students may also take place in content-based acceleration, such as single subject acceleration, curriculum compacting, dual enrollment, or credit by examination. The main difference between the two acceleration options is the number of years a student spends in a K-12 school system (Lupkowski- Shoplik et al., 2018). According to the NAGC (2014), acceleration is defined as progress through an educational program rate faster or ages younger than conventional allowing a student to move through traditional educational organizations more rapidly, based on readiness and motivation.

Van Tassel- Baska et al. (2020) observed mathematics classes were more likely than other subject areas to have differentiation through acceleration. The researchers observed from 30 minutes to more than one-hour classes at 57 different schools in six school districts, with the intention of observing a full lesson. All levels and core subjects were represented in the observations. Observations took place over the span of four years. The *William and Mary*

Classroom Observation Scale- Revised (COS-R), created to observe gifted education instructional strategies, was used in this study. Students who are gifted or advanced may experience acceleration as part of gifted services, most likely in math according to Van Tassel-Baska et al.

Compacting and Contracting

Students who are gifted and in a general education classroom may also participate in compacting, contracting, independent studying, or self-directed learning. Compacting is a form of acceleration in which the student is able to *compact* and condense the coursework to prove mastery. Then, the student can move on to the next standard after proving mastery of the skill or standard. Renzulli and Reis (2014), along with the NAGC, recommended curriculum compacting so students do not have to relearn a skill they have already mastered. Time spent on a skill that a student has already mastered can lead to students feeling frustrated, bored, and lacking challenge.

Students participating in contracting and independent study may work with a teacher or facilitator to create an independent learning plan or contract detailing what ideas, processes, and/or standards will be met during the independent work. Other names for independent study or contracting, which are popular among elementary school teachers and students, may include *Genius Hour* or *Passion Projects*. Self-directed learning, according to Brookfield (2009), puts the conception, implementation, and production in the student's hands to make decisions, with minimal guidance or teacher directed support.

Consultation

Students on consultation may participate in a general education setting and may meet with a gifted education facilitator as needed. Consultation services support students who have been identified as gifted with specific resources outside of the student's general education

classroom. A student on consultation may meet with their consulting teacher when it is time to update the student's learning plan, or the student is grade promoting. In the state of Florida, students who receive gifted services through consultation meet regularly with a gifted education teacher and general education teachers, as appropriate, to "plan, implement, and monitor instructional alternatives" (FLDOE, n.d., p.1). The consulting teacher may not provide direct instruction to the student but should offer academic support.

Views of Students who are Gifted in a General Education Setting

Students who are identified as gifted yet are unable to receive services outside the general education classroom still need to be uniquely supported to ensure maximum learning gains. Students who are gifted should not be expected to tutor or teach other students as enrichment. Students who are gifted, yet are in the general education classroom setting, should be engaged. If unengaged, these students are likely to become bored, and, in extreme cases, act out (Smith & Wood, 2020).

Stambaugh (2017) conducted a study focusing on the mental health of students who are gifted, measuring several different socioemotional factors, including boredom. This study used a nonexperimental, correlational design with 124 fourth and fifth grade students from two different states, who had previously been identified as being gifted and participated in gifted education services. Their parents were recruited through the child's school districts to participate in the study. The researcher made an effort to have minority students equally represented in the study. Students and parents were asked to participate in a survey via email or mailed paper copy. Students' perceptions of boredom were measured using the *Precursors to Boredom Scale* (PBS) in reference to their general education class and gifted education class. Five main factors of bored were determined: generalized boredom, lack of involvement of teacher, monotony, over

challenge, and underchallenge. Overall, students were most likely to become bored in their general education classroom because of underchallenged with a mean score of 3.63 ($SD = 1.19$). Using a regression model to examine boredom in gifted students as a prediction of negative behavior, Stambaugh found students reported participating in negative behavior due to boredom in their gifted education class 16% of the time and in their general education class 43% of the time. Stambaugh concluded students were more likely to act out in a general education class due to boredom from lack of challenge and engagement.

In a study conducted with Chilean students over a two-year period (Gomez- Arizaga et al., 2020), researchers found that students who spent the majority of their time in a general education class struggled or disliked a variety of events and experiences, but overall had an average experience. Chile does not have national policies concerning education for students who are gifted. The students who were identified as gifted struggled with group work because they felt like other students did not equally contribute to the group. Only one student, out of 12, reported his teacher giving him the option of choosing what type of assessment used. The other students mentioned they would have preferred an option to best express what they know or learned. Similarly, multiple students commented their teachers were more concerned about the test score than creativity or actual knowledge learned. Each student interviewed mentioned they disliked the repetition of a general education classroom, and they did not feel like they needed to review content as many times as their peers, which caused them to become bored in class.

Education for the Gifted in a Rural Setting

An area may be considered rural if the area is located a certain proximity from an urban area or a distance away. Proximity to urban areas impacts the resources available to students who are gifted (Puryear & Kettler, 2017). Puryear and Kettler studied the 1,029 school districts in the

state of Texas. Data were collected from the Texas Education Agency. Each district was classified as rural or nonrural. In Texas, 685 school districts were considered rural. Two demographic variables were noted: the total number of students from each district and the percentage of students that were eligible for free and reduced lunch. Advanced academic participation and performance were used as the outcome variables. The researchers concluded non-rural school districts had greater participation and opportunity rates than rural school districts. Puryear and Kettler also discovered the percentage of faculty for students who were identified as gifted and talented was less than 1% in rural Texas areas.

Brigandi et al. (2020) studied freshman, sophomore, and junior high school students who attended a school for academic enrichment. Additionally, the researchers studied first-generation college students. The study aimed to determine what characteristics of the enrichment school were key to the student's ability to succeed in college and careers. Data were collected by the program coordinators. Questions were Likert-scale-style questions in 35 different categories. Large numbers of students who would typically demonstrate high levels of academic achievement fail to do so because of lack of opportunities for acceleration and enrichment. In an effort for individuals who are gifted to reach their full potential, they should be appropriately challenged.

Students who are gifted and live in a rural setting face unique challenges their urban or suburban peers do not face. To exaggerate the smaller population of a rural region, the population of individuals who are gifted is likely to be smaller as well. The state of Texas has more rural schools than any other state in the United States of America (Puryear & Kettler, 2017). Hodges and Ottwein (2021) found rural schools in Texas receive less than half of what urban and suburban schools receive for gifted enrichment and acceleration programming. In this

study, Hodges and Ottwein requested the state allocation of funds from the Texas Education Authority. The report only stated how much money the district spent on gifted education, not how much the district received. The researchers then requested the demographic information from each district. Hodges and Ottwein found that any districts with less than 10 students in a certain demographic were reported as 9, as opposed to the actual number of students. The dependent variable was how much money was spent on each student in gifted education programming after the state mandated minimum spending. The independent variables were location and year. Using multiple regression, Hodges and Ottwein concluded rural school districts allocate half of the funds to each student who is gifted in a rural school compared to nonrural school districts allocation of funds per student. Due to lack of widespread need, many of the schools and districts in rural areas do not receive adequate funding for gifted enrichment and advancement.

To combat the struggle of enriching and accelerating curriculum for rural students who are gifted, educators in Australia created learning opportunities for students using nearby plots of land (Morris et al., 2021). Students were able to test soil, research native plants and plants that would thrive in the environment, as well as other fieldwork. Morris et al. conducted research in one school with 46 students, ages 12-13 years old who participated in an academic enrichment program. Researchers distributed *The Status and Quality of Year 11 and 12 Science in Australian Schools* questionnaire to students to determine how the fieldwork program differed from the general education science program experience. Students were then able to select and work collaboratively to revitalize a small plot of land. The latter portion of the research involved observations and focus groups to understand the feelings and experiences of student participants. Qualitative data were coded to determine main ideas and overarching themes. Morris et al.

determined students who participated in the science enrichment program reported higher levels of interest in science and showed a higher level of science literacy than peers who did not participate.

Education for the Gifted in an Urban Setting

Students in high-poverty schools have less access to enrichment or acceleration (Crabtree et al., 2019). Crabtree et al. focused on a large, urban school district in the United States. Fourteen thousand, four hundred eighty-nine students in the district, about 10%, were identified as gifted. Sixty percent of the students were eligible for free and reduced lunch. The majority of students in the district were Black or Latino, yet these groups were not equally represented throughout the district. Using data from schools, the researchers categorized each school as low poverty or high poverty. Using total student population and the number of students enrolled in gifted education, researchers were able to calculate the number of students participating in gifted education and part of the high- or low-poverty category. Due to close proximity to or location in an urban area, students are more likely to have access to gifted programming. However, many schools do not offer gifted enrichment or acceleration to students. The focus may be on maintaining or reaching grade-level standards. The focus and intent of funding and attention goes to students who are behind grade level or need to make greater learning gains, as opposed to funding gifted education and enrichment.

Kurt and Chenault (2017) studied urban and suburban students who are gifted in Ohio using the *Education Value-Added Assessment System (EVAAS)*, which was developed to understand student learning outcomes. Kurt and Chenault conducted a *t*-test comparing value-added scores of urban and suburban students who are gifted. The two groups' scores were significantly different according to *t*-tests ($p < 0.05$). The researchers concluded students who

are gifted in urban areas are learning less content than their suburban peers and are making less learning gains than their suburban peers. The success of urban students who are gifted relies on a variety of factors including quality of education, support available, and school culture.

Gifted Education Funding

Enrichment and acceleration for gifted students and programming created specifically for students who are gifted are not funded nationally. States delegate how gifted education is funded and implemented. In some cases, how gifted education is funded is determined by the school district or school. Twenty-three states do not fund gifted education at the state level (Rinn et al., 2020). At the start of the 2013-2014 school year, California stopped funding gifted education at the state level. According to the California Department of Education (2021), individual California schools are able to fund and/or appropriate funds for gifted education as they see fit.

Two of the most population-dense states in the United States of America have phased out gifted education in the last 10 years. In 2013, California elected to no longer offer gifted enrichment services at the state level (Gifted & Talented, 2021). In 2021, New York also eliminated state-funded gifted education services (LearnDOE, n.d.). In both states, gifted education can be offered on a local level or in a privatized educational setting. Private schools, charter schools, independent tutoring, and enrichment programs have filled the role of traditional gifted education for those who can afford additional services (Gifted & Talented, 2021; About LearnDOE, n.d.).

Jacob Javits Gifted and Talented Students Education Act

In an effort to support gifted education, the Jacob Javits Gifted and Talented Students Education Act was created in 1988 as part of the Elementary and Secondary Education Act. The

Javits Act was first introduced to the US Senate in 1987. The Javits Act is named after Senator Jacob K. Javits of the Republican party for his dedication to promoting gifted education in public schools. The Jacob Javits Act was the first time specific federal funding was provided for gifted education. Prior to the inception of the bill, gifted education was funded under different subsections of the Elementary and Secondary School Improvement Amendments. The goal of the program was to partner with elementary and secondary schools to support students who were identified as gifted and talented. In 1994, the Javits Program was included in the America's Schools Act, then, in 2001, it was included in the No Child Left Behind (NCLB; Boren, 2007).

The program, which is federally funded and discretionary, prioritizes gifted education for traditionally underserved populations in education (Boren, 2007). The Javits Act does not fund local gifted education programs but can help provide training or further education for teachers of gifted students. The Javits Act may also directly fund gifted education research. Further, the Javits Act was created to fund the National Research Center on the Gifted and Talented, continuing to do so at the time of the research. However, only 30% of the total amount of money appropriated for the Javits Act can be spent towards program operations. In February 2022, the United States Department of Education (DOE) announced the program will award up to \$6.6 million dollars in the upcoming fiscal year (Press Office, 2022). According to the NACG (2018), the Javits Act is a substantial source of funding for gifted education throughout the United States of America (p. 39).

Individuals who are Gifted and the Workforce

Individuals who are gifted may have a wide variety of interests and talents, including their career interests. Their unique and expansive interests may or may not line up with traditional career paths. Further, individuals who are gifted may have a hard time narrowing

down their interests to choose a career path. A unique aspect of gifted enrichment and education is the opportunity for students to be exposed to different careers and fields of study.

Career Interests of Gifted Individuals

Vreys et al. (2016) studied the strengths and needs of adults who are gifted in the workforce through two different Likert style-surveys and testimonies from participants. Study participants were made up of a group of 48 adults who were identified as gifted. Surveys were completed online. Ninety-eight percent of participants reported feeling like they were quick at analyzing new information and always looking for ways to improve. The majority of participants also reported having many different interests (95%), enthusiasm for individual passions (97%), and a desire to be the best in whatever task they undertake (90%; p.53). Participants reported their main needs in a career were the need to know more and the need to be appropriately challenged (94%; p. 54). All participants reported struggling with high demands of themselves. Vreys et al. determined individuals who are gifted are creative and passionate workers that want to accomplish challenges and perform meaningful work.

Persson (2009) studied the career choice and work satisfaction of individuals who are gifted. Two hundred eighty-seven individuals, all participants of an international organization for gifted individuals, were surveyed using a modified version of the *Work and Life Attitudes Survey* (WALS). Based on survey responses, participants were most likely to work in science, technology, or social work. As a whole, participants working in science, technology, and social work reported average work satisfaction levels. Participants who reported starting their own business and those in leadership positions reported high levels of work satisfaction because of the opportunity for challenges, creative opportunity, and the variety of work tasks. Participants in leadership roles reported feeling “very satisfied, fulfilled, and productive” (p.12). Persson

emphasized that individuals who are gifted may enjoy sharing their content knowledge with their coworkers and helping those around them to achieve.

Careers in STEM

Sahin and Yildirim (2020) studied 17 students, ages 13-15, who were identified as gifted and talented. Students were administered the open-ended *STEM Education Interview Form (SEIF)*. Data were coded for overarching themes and main ideas. A majority of the students in the study reported their interest in a career in science, technology, engineering, and math (STEM) was sparked after participating in a STEM program due to the group work, opportunity for curiosity and creative thinking, and the investigative nature of STEM programming. According to Şahin and Yildirim, students who are gifted are likely to be interested in perusing a career in STEM after being exposed to STEM curriculum.

Careers in Education

The Cardinal Principals of Secondary Education (Department of the Interior, 1918) set forth that one of the goals of education, specifically secondary education, was to support vocational development in students. Students should have exposure to a variety of fields and careers, so they are able to choose what best fits their skills and interests. According to the Department of the Interior's Commission on the Reorganization of Secondary Education (1918), "Those who are successful in a vocation should be the ones to teach the students in either the school or the workplace" (p.13). Individuals who are gifted may enjoy the experience of leading, teaching, or mentoring others in their designated field of expertise.

Summary

The review of the literature explored the information surrounding individuals who are gifted, including the identification and classroom experience of students who are gifted, teachers

of the gifted training, and state policies concerning gifted education. Gifted education goes beyond identification, assessments, and academics, impacting individuals outside of the classroom. Another important aspect of the literature which emerged was information regarding adults who are gifted. Adults who are gifted are as unique as children who are gifted. Further, the literature illuminated the need for research on the career choices of graduates of gifted education programs. To further the knowledge of gifted individuals and their experiences, it is important to note who (individuals, groups, or regions) is traditionally missing from the narrative of gifted education, as well as explore the challenges, which are specific to individuals who are gifted throughout their lifetime. In the following chapter, a detailed explanation of the methodology used in this phenomenological study is described.

III. METHODOLOGY

The purpose of this phenomenological study was to explore the career decisions of graduates of a K-12 gifted education program. An individual who is gifted is described as an individual with a high IQ and unique talent or capability beyond the peer group (Callahan et al., 2017). Traditionally, a high IQ test score is classified as a score of 130 or higher (Kermarrec et al., 2020). For the purpose of this study, a unique talent or capability is defined as skill or talent developed at a rate asynchronous to peers (Morelock, 1996).

Description of Research Design

This research was a qualitative study using a phenomenological design. Phenomenological research is a form of qualitative research focusing on the shared experience of participants or what each individual has in common based on life experiences (Creswell & Poth, 2018). This study was best suited for a phenomenological approach due to the shared experience which drives this research and relates all the participants to each other. Phenomenology was also chosen due to participants being able to describe their experiences in the environment in which they took place, as opposed to a controlled environment (Merriam & Tisdell, 2009). The shared experience in this research was that each participant was a graduate of a K-12 gifted education program. The goal was to recruit five to 25 participants, pursuant to Creswell and Poth's (2018) suggestion.

Participants

The targeted population of participants for this study was adult individuals who graduated from a K-12 gifted education program. A total of 20 individuals over the age of 18 participated in this research. The average age of participants was 29.5 years old. Participants all attended school in the United States of America. All but one participant was currently living in the United States. Participants were recruited via the social media platforms Facebook and Instagram. The researcher posted the recruitment flyer (appendix A) on her personal social media page and a sorority alumnae page. The researcher asked for social media participants to share the recruitment flyer on their own social media pages. After 48 hours, more than 175 individuals responded with interest in participating.

The researcher accepted the first 25 individuals who scheduled a meeting via Calendly.com. Five individuals had to cancel due to scheduling conflicts, leaving the sample size at 20. Each participant participated in a Zoom interview, which ranged from six and a half minutes to 37 minutes and 25 seconds. Participants were excited to share their experiences, which led to a collection of authentic and unique data. All participants were currently employed, pursuing higher education, or both, at the time of the data collection. Out of 20 participants, eight participants worked in a STEM role, five participants considered their main role to be a STEM educator, and three participants worked in education without an emphasis on STEM. Four participants did not work in education or STEM and were labeled as Other. Three of the four participants labeled as Other had careers in finance or business. One participant worked in a role that could be described as Education or Other.

Table 1*Participants, Career Field, Gender, and Age*

Participant	Career	Gender	Age
1	Other	M	27
2	STEM	F	47
3	Other	M	22
4	Education/STEM	F	24
5	Other	F	25
6	Other	M	28
7	Education/STEM	M	28
8	STEM	M	47
9	Education	F	37
10	STEM	F	28
11	Education/STEM	F	29
12	Other	F	27
13	STEM	F	28
14	Education/STEM	F	14
15	STEM	M	24
16	STEM	F	22
17	STEM	F	45
18	Education	F	24
19	Education	F	25
20	Education/Other	F	40

Five participants worked as a traditional educator. For the purpose of this study, a traditional educator is an educator who teaches in a K-12 setting, including public, private, or charter schools, in-person or online. Eight participants worked as a nontraditional educator. A nontraditional educator is a professional in their respective field who teaches or mentors in that field. For example, a doctor who works with individuals in a residency program or an undergraduate lecturer in a foreign language would be considered a nontraditional educator. Two individuals who currently do not work as either type of educator expressed interest in teaching other professionals in their current field later in their career. Both participants in this category worked in medicine. One participant was a former K-12 teacher and, at the time of this study, worked in an informal, creative business setting.

Table 2*Participants and Type of Educator Role*

Participant	Type of Educator
1	None
2	Nontraditional Educator
3	None
4	Traditional Educator
5	Nontraditional Educator
6	Nontraditional Educator
7	Nontraditional Educator
8	None
9	Traditional Educator
10	None
11	Nontraditional Educator
12	Nontraditional Educator
13	Nontraditional Educator
14	Traditional Educator
15	None
16	None
17	Traditional Educator
18	Traditional Educator
19	Nontraditional Educator
20	Traditional and Nontraditional Educator

Role of Researcher

The researcher was interested in this subject matter because she is a graduate of a gifted education program, as well as a gifted education teacher. She struggled to choose a career path before entering the education field. Disappointed by the lack of literature concerning adults who are gifted, including if adults who are gifted choose to work in the education field, and the career paths of individuals who are gifted, the researcher decided to pursue this research concept. The researcher has worked in K-12 gifted education for 6 years through teaching the Program for Academically Talented Students (PATs) and Advanced Placement (AP) courses in her school district. She created lessons, worked on curriculum development, and participated in teacher mentoring programs as a mentor and mentee.

Measures for Ethical Protection

Ethical protection procedures as outlined in Creswell and Poth (2018) were followed. Once participants scheduled an interview, they were directed to read and digitally sign an informed consent document. In this document, the researcher detailed the safety and security protocols in the study, including what would happen to the data after the completion of the study. Prior to the interview starting, the researcher confirmed that each participant was able to read the informed consent and reiterated that, if the participant had any questions about the research, they would be able to contact any of the members of the research team. All questions were phrased simply and plainly, so the questions would be easy to understand.

Research Question

The goal of this research was to understand the experiences of individuals who graduated from a gifted education program and their career paths; specifically if the individual chose to

include or exclude education in their career paths. This research included adult participants over the age of 18. All participants were graduates of a gifted education program. The research question was, “As a graduate of a K-12 gifted enrichment program, how did your experience in a gifted education program encourage you to include or exclude the education field as a career path?”

Data Collection

The data collection instrument was created by the researcher and committee to develop a holistic understanding of the individual who is gifted and their career choices, specifically whether the individual chose to include or exclude the education field as a career. Each question was open-ended to allow for the participants to add as much or as little detail as they felt comfortable. The instrument was designed in line with the Creswell and Poth (2018) suggestion to create an interview guide with questions that are “open-ended, general, and focused on understanding your central phenomenon in the study” (p. 165).

Procedures

An application was submitted to the IRB committee at Southeastern University. Once approved, the study was advertised via social media. Within two days, more than 175 individuals expressed interest in participating in the study. The first 25 individuals to schedule an appointment via the website Calendly.com were selected to participate. Upon creating an appointment, participants were directed to the digital copy of the informed consent document. Participants could choose to sign the digital copy, using an e-signature in the form of a check box option, or request a paper copy. All participants chose to use the digital consent form.

Each participant was interviewed via Zoom. At the beginning of each meeting, the participant was reminded that at any point in the interview, the participant was able to skip a

question or end the interview all together. Alternatively, each participant was told if they would like to go back to a question or topic, the participant was welcome to. A slideshow was shared with the participant with each question written out, so the participant was able to answer the question fully without worry of forgetting a piece of the prompt. The participant was read each question and was given time to answer fully. The participants were asked follow-up questions if needed.

At the conclusion, the participants were asked if there was anything else they would like to contribute to this study. Some participants had questions for the researcher. All additional questions were answered, and the participants were thanked for their time and the sharing of their experiences. Once the meetings ended, the audio was downloaded to the researcher's computer. After, the audio was uploaded to Otter.ai to be transcribed. Transcription took approximately five minutes per interview upload. Transcripts were shared with participants for validation.

Methods to Address Assumptions of Generalizability

To address any assumptions of generalizability, all data collected from the interviews and transcripts were accurately reported as stated by the participant and representative of the participants' experience. Due to the unique nature of individuals who are gifted and their experiences, there may be limited generalizability in this study. However, thematic generalizability is possible due to the nature of a phenomenological study and a shared lived experience. Van Manen (2014) suggested phenomenological questions and research should include a clear phenomenon, an understanding of the experience, an explanation of the essence of an experience, and an opportunity for deep and original insight.

Data Analysis

Research Question

The main question driving this study was: As a graduate of a K-12 gifted enrichment program, how did your experience in a gifted education program encourage you to include or exclude the education field as a career path? From this overarching question, an interview protocol was created. Interviews were conducted and recorded via Zoom. Once all interviews were completed, general categories were developed to begin organizing the information. The original categories were gifted experience, staffing team and teachers, current job and/or education, family influence, role as an educator, and socioemotional concepts. Upon further reviews, parents as educators, varying interests and careers, as well as negative experiences, were added as categories. Negative experiences were broken down into negative experiences with peers, teachers, and self.

After further review, data were sorted into seven categories and then collapsed into four main themes. The overarching themes included Career and Interests, Social Emotional, Gifted Program Experience, and Family Influence. The final Career and Interests theme was comprised of careers, variety of interests/careers, and role as an educator. Staffing team and gifted programming were combined to create Gifted Program Experience. Family influence and parent-as-educator were combined to create Family Influences. Negative Experiences were split between Social Emotional and Gifted Program Experience. The overarching themes answered the research question by exploring the different experiences of adults who graduated from a gifted education program.

Summary

Using a phenomenological research design, 20 participants were interviewed from an interest pool of more than 175 individuals. All participants were over the age of 18 and a graduate of a gifted education program. Participants participated in a Zoom interview with the researcher, and audio was transcribed after using Otter.Ai. Using the collected data, reoccurring phrases and ideas were organized into categories. After several reviews of the data, four major themes emerged: Career and Interests, Social Emotional, Gifted Program Experience, and Family Influence. Data collected from the participant and organized by the researcher give a deeper understanding of the experience of adults who graduated from a gifted education program and their career decision making process. The following chapter describes the results of the data collection categorically.

IV. RESULTS

The purpose of this phenomenological study was to explore the career decisions of graduates of a gifted program. An individual who is gifted is described as an individual with a high IQ and unique talent or capability beyond the peer group (Callahan et al., 2017). Traditionally, a high IQ test score is classified as score of 130 or higher (Kermarrec et al., 2020). For the purpose of this study, a unique talent or capability is defined as skill or talent developed at a rate asynchronous to peers (Morelock, 1996).

Methods of Data Collection

Data were collected through one-on-one interviews between the participant and the researcher. Each participant was asked a series of seven questions to gather details and an understanding of each individual's unique experience of being a gifted individual and determining their career path, specifically if they chose to pursue the field of education as a profession. Interviews were recorded through Zoom.com, and the audio was transcribed by Otter.ai. Transcripts were further validated by participants. Any adjustments indicated by participants were made. After the transcription process was completed, several coding passes looking for reoccurring phrases and ideas through the data were completed.

Findings by Research Question

Through careful data collection and analysis, four main themes emerged from the data. These four themes provided further insight into the experience of an individual who is gifted and

their career choice. More specifically, insight was gathered into whether individuals who are gifted choose to pursue the field of education as a career path. The four main themes coming from this data were Gifted Program Experience, Career and Interests, Family Influence, and Social Emotional Influence.

Themes

Gifted Program Experience

The Gifted Program Experience (GPE) included day-to-day experiences in gifted education, experiences with peers and classmates in the program, experiences with general education staff and students in reference to the program. The GPE also included interactions with gifted education staffing team members. Participants had unique and varying experiences in their individual gifted education programs. However, not all experiences with gifted education programs were positive. The following sections elaborate on the GPE of study participants.

Day- to-Day Experiences

Participant 19 said, "What I liked the most about gifted is that it was just a little bit something different in the regular school day." Gifted program structure varied across participants; however, opinions remained predominantly similar. Students were either pulled out of their general education class or they were part of a gifted cluster class. Participant 2 reported, "Elementary school was actually more beneficial." Participant 16 reflected, "I had gifted ed for all of my core classes [in elementary school], my ELA, my social studies, my science and my math". "... so, it was just a little bit more rigorous of work, usually about two grade levels." Participants reported enjoying the social aspect of being in small classes with peers that learned and worked on the same academic level as themselves. "So being in like, those classes with, like, you know, your peers that are at the same level...it was refreshing to have challenges rather than,

just sitting through class bored...And so it was nice to have more stimulating educational conversations,” said Participant 3.

Middle school was reported to have a less structured program than the elementary school gifted education programs. “Middle School not that helpful,” said Participant 2. Students receiving gifted services were more likely to be placed in advanced or honors core class, sometimes with a gifted education elective. “Our advanced classes were just like the gifted population at our school,” Participant 4 added. Several participants mentioned being more interested in other electives or activities than a gifted education elective, so they opted out of the program to pursue other interests. “I had the option to join gifted in middle school, and I chose to do a different elective. I chose to do band instead of gifted,” said Participant 19.

Similar to participants’ experiences in middle school, “High school didn't really have opportunities for gifted classes” (Participant 9). Upon entering high school, gifted individuals had fewer options for gifted enrichment; however, they did have more access to different courses and levels of rigor. Access to a variety of rigorous courses was often accomplished through honors courses, Advanced Placement courses, and dual enrollment through a college or university. One participant explained their high school gifted services involved attending seminars instead of regular classes two days a week and independent studies the other three days. Additionally, part of their independent studies involved a service-learning experience (Participant 15).

Gifted Education Teachers

For many individuals in a gifted education program, teachers made an overall impact on their experiences. The majority of participants mentioned a specific teacher or group of teachers by name and emphasized an activity they did or a specific trait of that teacher. Participant 7

stated their gifted education teacher was the first person that encouraged them to start thinking about their future and what they were passionate about. Participant 18 added, “I always had that really close connection with my teachers...my teachers always saw something in me that I didn't.”

Participants expressed their teachers love of learning and excitement in the classroom made the participants excited to learn. “I remember our particular computer instructor just really being enthusiastic about the technology and the possibilities,” said Participant 8. Participant 6 added,

I remember [teacher’s name], who was the fourth or fifth grade gifted teacher was just really hands on. And then the fifth-grade teacher [teacher’s name], just had the most energy out of any teacher I've ever met in my entire life.

Further, Participant 15 stated one of the reasons they were excited about learning was “the fact that I had teachers who are really passionate about the subjects.” Participant 17 believed that they were assigned to high-quality teachers due to their gifted identification. Participant 17 added, “I think some of the better educators do get assigned to the gifted [education] program. I think that they (the gifted education program) do have some of the best educators out there.”

Positive Experiences In and Surrounding Gifted Education

Participants reported many positive experiences within their gifted education experience. Participant 20 reported gifted education allowed them to follow their passions. Participants 14, 16, and 18 expressed that the majority of their remembered experiences involved experiments or experiential learning, including special field trips, summer experiences, and special privileges. One of these special privileges was access to new technology (Participant 8). “The gifted

program made me love learning.” said Participant 14, “My gifted classes were fun, and it made me want to still go to school, because at one point, I was like, why am I even in school?”

Negative Experiences Surrounding the Gifted Program Experience

General Education Class Time. Because many students who participate in gifted education programming are pulled from a general education setting, they miss part of the general education class’s instructional time. Participant 2 explained their general education teacher was often irritated with them upon return from the gifted services because the general education teacher would have to recover material or reexplain what the student missed. Participant 2 added, “It almost felt like it, almost felt like our teachers were punishing us for being out of the [regular classes].” Participant 1 remembered reading a book with their general education class and the teacher became frustrated because Participant 1 had a deep understanding of the story and historical time frame, yet the class had not covered that material yet.

The transition from a gifted education program back to general education classes challenged participants in class and with their perceptions of school. Participant 11 expressed feeling frustrated when they were taught or knew a different way to solve a problem, yet the general education teacher would reprimand them or take off points for using the new method. To further that sentiment, Participant 12 stated:

I think ... gifted programs, looking back, taught me how much I didn't like regular school. Doing all these like really, really fun hands-on things... then going back to regularly structured classes... really just showed me this is not the way that's best for me to learn.

Peer Interaction. Participant 12 explained they struggled more with the students in their general education class. Participant 12 would go to the gifted program and be asked to share

what they did while they were gone in their gifted education class with the general education class; eventually Participant 12's classmates grew to resent and ostracize them. Participant 1 suggested educators need to be aware of how classmates view students who are pulled out of class. In reference to feeling like they were falling out of the general education classroom community, Participant 1 said, "I sort of became like more and more of an outsider."

Careers and Interests

Careers and Interests encompasses any mention of career paths or career choice and academic interests. Individuals who are gifted are known for having a variety of interests and talents, which can make it challenging to focus their career paths. Conversely, individuals who are gifted are also known to have an intensity and deep fascination with subjects they are interested in. Ozcan (2017) emphasized the challenges adults who are gifted may face when choosing a career based on their multitude of interests and passions.

Variety of Interests

Individuals who are gifted may have many interests due to their many natural abilities and wide variety of talents. Purpose and satisfaction were also reported as being important to individuals who are gifted. Participant 3 emphasized, "I've kind of bounced around trying to find something that I enjoy doing." The tendency to have many interests and talents may make it hard for individuals who are gifted to choose a career field. Participant 20 reported, "I think growing up, every year, I wanted to be something different...So, when I was looking at, like what I wanted to do, it was always whatever was interesting to me [at the time]." Many of the participants shared a similar story, including pursuing higher education in a specific field yet changing their mind after experience in the field. Participants 1 and 20 both started their own businesses to merge their interests into one career field.

Interest in STEM. Eleven participants reported working in STEM or a STEM related career. A STEM related career may look like teaching science in education. Some participants related their interest in a STEM career to their exposure to STEM in their gifted enrichment experience. “I think the gifted program gave me a lot more insight into STEM fields,” Participant 16 said. Participant 15 replied, in reference to their experience with STEM in gifted education, “I wouldn't say it steered me toward STEM. But it told me it taught me that I was better at STEM than I thought I originally was.” They further reported their teachers and instructors encouraged them to pursue STEM fields, even when Participant 15 felt as if they were not naturally talented in math and science. Participant 15 reflected, “[My teachers] helped me realize there's different ways of looking at [Math and Science].” Participant 15 now works in a STEM field and has a master’s degree in aerospace engineering.

Table 3*Participants with STEM Careers*

Participant	STEM Career
2	Pediatrician
4	Math Educator
7	Environmental Management
8	Informational Technology
10	Nursing
11	Space Geologist
13	Biomedical Research
14	Electronics
15	Naval Aviator
16	Microbiology Student
17	Candle Creator

Interest in K-12 Education. “I’ve been told you would be a really good teacher...you would love it. And I really wanted to do it...I loved the way those teachers poured into me and to other kids... I just thought, I would love to be a teacher and to do this for others.” Participant 6 added. Many participants expressed a strong relationship with their own gifted education teachers, and some credited that strong relationship and experience with their own interest in pursuing the education field as a career. Participant 6 further added, “I remember my gifted teacher, I don’t remember her name, but I know that she had a huge influence on my career choice.” Participant 18 credited their fourth-grade teacher as the main influence in choosing education as a career path.

“I liked knowing the answer to things,” said Participant 9, “And so, as a teacher, you kind of are that source of information.” Participant 9 also expressed their interest in traditional education was due to their natural interest in learning and sharing what they had learned. They always had interest in being a teacher, but that interest was solidified after taking career preparation classes in high school. Participant 17 also participated in career preparation courses and a future educators club. “For me, it was always a calling. I always wanted to work with kids, there was no question,” said Participant 17. Participant 20 stated, “One of my passions has always been education”. “[I] fell in love with the world of education,” Participant 4 reported.

For some individuals, teaching presented an opportunity to be challenged and engaged in learning in a familiar environment. Participant 18 stated, “So, I’m constantly being challenged, but just in life in general. Like I liked that extra step. And I don’t know, that’s what [teachers] got to do every day. And that was cool.” Participant 1 said, “Figured all I had, basically, was knowledge...not that teaching is easy, but just for me, it was it would be something that I could enjoy”

Table 4

Participants who are Traditional Educators

Participant	Type of Educator
4	Traditional Educator
9	Traditional Educator
14	Traditional Educator
17	Traditional Educator
18	Traditional Educator
20	Traditional and Nontraditional Educator

Excluding Traditional Education as a Career Choice. Participant 7 reported the main reason they did not pursue traditional classroom teaching was because of the pay and how teachers are treated. “So, when I was a kid, up until I would say, up until high school, I wanted to be a teacher,” emphasized Participant 7, “I was like, dead set on being a teacher.” However, after Participant 7 experienced what was required of teachers beyond teaching lessons, such as paperwork, government involvement, and testing, they decided it was not a viable career path for them. Participant 6 excluded teaching as a career path for similar reasons. They expressed interest in traditional classroom teaching but knew teacher’s salary and their monetary goals did not align. Participant 6 further explained, “I knew that I had other priorities, such as becoming a community leader. Earning ...what I thought was a good better salary for myself and for my family. And I just knew that those two things [teaching and monetary goals] kind of didn't go hand in hand.”

Nontraditional Educators

Table 5

Participants who are Nontraditional Educators

Participant	Type of Educator	Education Role
2	Nontraditional Educator	Supports Interns
5	Nontraditional Educator	Undergraduate Lecturer
6	Nontraditional Educator	Youth Mentor
7	Nontraditional Educator	Outdoor Education
11	Nontraditional Educator	Classroom Ambassador
12	Nontraditional Educator	Supports Interns
13	Nontraditional Educator	Undergraduate Lecturer
19	Nontraditional Educator	Undergraduate Lecturer
20	Traditional and Nontraditional Educator	Former K-12 Teacher Current Private Art Instructor

Table 5 shows participants who are not in the traditional classroom, but they are all involved with the education of others in some capacity. “I’m, in fact, actually, an informal educator,” said Participant 11. Participant 11 further explained that as an informal educator they did not teach in a classroom, yet they still worked in an education capacity, teaching and mentoring younger professionals. Several participants, while not working in a traditional classroom, teach or work with students in a professional setting and would consider themselves as informal educators. Participants 2 and 12 both work with interns from local high schools and colleges in their professional workplace setting. Participant 2 works in a hospital and Participant

12 works in a nonprofit office. Their roles involve creating the internship programming, as well as providing appropriate professional support to internship students. Participant 6 currently mentors students through a church youth group. Participant 7 previously worked in outdoor education to teach students attending daily and overnight retreats about forest conservation, local history, and leadership skills.

Participants 5, 13, and 19 teach or have taught in an undergraduate setting. Participants 5 and 19 have master's degree in their respective field. At the time of this study, Participant 5 had a master's degree in French, as well as a Doctor of Jurisprudence degree. Participant 19 had a master's degree in Literature. Participant 13 had a Ph.D. in Biomedical Science. Considered experts in their field, they have the appropriate education and experience to teach in a more specialized setting, such as to undergraduate students in a college or a university. Participant 20 used to teach in a traditional classroom; however, they now own a craft business and teach private art lessons for children and adults through their business. Participant 11 works for a government agency which specializes in space exploration and technology. In their role, they perform research in a lab, as well as work as a classroom ambassador to bring advanced science education to students in the classroom.

Family Influence

Family Influence highlighted the influence family members can have on the career choice of gifted individuals. Several participants had parents who were or are educators at the time of this study. Those participants felt their parents' career choices had an impact on their own career choices. Many participants came from families with strong opinions on what the individual who is gifted should do or should not do as a career path. Participants reported feeling as if family members influenced their career choices. In some cases, family members supported the

individual in whatever career direction the participant was interested. In other cases, family members supported the individual emotionally or financially.

Family Influence on Career Choice

Family members and trusted friends can influence an individual's career choice. The societal negative perception of a career field or specific career may be enough to persuade an individual into a field that is viewed more highly by their social group. "Like a lot of parents, I think mine looked upon certain degrees and career choices as 'Oh, how are you going to get a job if you do that?'" reflected Participant 15. Other participants experienced a push toward a type of career or level of expertise. "My family really kind of did a good thing by pushing me toward things more like careers more oriented towards helping people," said Participant 3. Participant 5 recalled that both of their parents are professionals and there was an unspoken expectation that Participant 5 would also pursue graduate school and the level of professionalism associated with an advanced degree.

Support from Family. In reference to changing career fields and pursuing graduate studies in a different field, Participant 11 credited their parents for their support, both emotionally and financially. "If I didn't have the family I had, I wouldn't have been able to do what I did. Like outright financially" said Participant 11, "They have been so supportive. I think that my parents always knew I could have done better". Participant 6 contributed much of their success to their family's support and generational standing in the community. "I won't say privilege, but that advantage that I have, and I'm very thankful for it, and I will always make sure to call it out. But you know, family has definitely helped me get to where I am today" said Participant 6. Further, Participant 4 expressed similar feelings. Participant 4 added, "They've been very supportive and, you know, finding resources and sharing them with me as much as they could."

Pressure from Family. Many participants reported feeling pressure from their families in a variety of areas, including the pressure to perform and achieve, as well as the pressure to pursue certain interests. Participant 1 stated, “My mom always pushed me super, super hard. She's a complete perfectionist. So like, for me, like getting an A wasn't good enough.” Participant 1 also explained that they felt an immense pressure to follow a career in STEM because their grandfather was a successful scientist. Participant 1 said, “I felt like my mom had always been pushing me to sort of emulate his path.” Similarly, Participant 13 expressed feeling like they had to live up to their parents’ expectations and did not want to let them down. Participant 13 explained, “I guess my parents [were] always bragging that I'm smart. So I just felt like I had to live it up. So, that probably is probably how they influenced me.”

Participant 8 grew up in a lower income area and neither of their parents went to college. However, Participant 8 and their sibling felt pressure to attend and graduate from a college or university. “But growing up, there was never talk about there not being an option for college for my brother and I; it was never, ‘if you go to college,’ it was always ‘when you go to college’” said Participant 8. Both siblings were expected to earn scholarships and contribute to paying for college as well.

Participant 12 said, "My family was so proud of me for being gifted. And that became like, you know, what they would talk about in front of me with everybody, and it became like an identity thing.” After another local student was published in the newspaper for earning a similar accolade as Participant 12, Participant 12 felt as if their family was disappointed in their lack of achievement. “And then I felt like, I wasn't publicly special enough for my family. And I felt bad about it,” explained Participant 12.

Parent as Educator. Some participants were children of educators and the experiences of their parents weighed in on the participants' career choices. Participant 20 said, "My mother was a career elementary school educator for her entire career. And I mean, she always told me not to go into education." Some parents acknowledged their struggles and encouraged their child who was gifted to take a different approach to career choices. Participant 7 stated, in reference to seeing their mother be a teacher, "I just realized I didn't want to be in it because of the beating down that teacher got and kind of the judgment from parents." Alternatively, several participants who are currently educators were encouraged by their parents who also were or are in the education field. "So, my mom talked me into applying to be a sub for the school district. And I did that and then fell in love with the world of education," recalled Participant 4. Participant 4 also explained that their mother gave them the final encouragement needed to pursue teaching as a career.

Social Emotional Influence

Social Emotional Influence encompasses any social aspects or any situations that created a memorable emotional response in the participant. Participants expressed many different experiences and feelings surrounding their gifted programming and vocational decision making. Several participants expressed the importance of representation, specifically of women, in professional fields. The influence of mental health on participants' GPE was a subtheme.

Mental Health Awareness

Several participants expressed struggling with their mental health or the need for awareness for mental health services for individuals who are gifted. "You know, the GT kids were always a little quirky in their own ways," explained Participant 8. Participant 12 expressed concern over their own experiences with mental health and being a gifted individual. Participant

12 shared their gifted tendencies covered, what they learned as an adult, to be a diagnosis of a mood disorder and autism. Participant 12 recalled, “Nobody thought to notice, even though looking back, there were a lot of signs.” As a child they were diagnosed with ADHD; however, after sharing their experiences with a mental health professional as an adult, they learned they were not presenting the symptoms of ADHD. Participant 12 felt they were misdiagnosed because they had multiple creative outlets and understanding teachers. Participant 11 added, “I have pretty severe ADHD. But I also am apparently somewhat intelligent. As a result, no one really knew what to do with me because I acted like I was three years younger than I was, except for I was way too smart to be held back for social reasons.” Participants 8, 11, and 12 are not the only study participants with concern over the mental health of students who are gifted. Participant 13 expressed concern for individuals in the program developing anxiety. “I know a lot of them burned out a lot more quickly than I think maybe their teachers had hoped”, reflected Participant 13.

Social Minority

Gifted education programs are a minority group of a larger school or education community. However, within the gifted education group, more specific groupings developed. Some participants emphasized their experiences as a member of a minority group in their gifted education class or their experiences with minority groups in gifted education. Participants reported having experiences with speakers of other languages, differing socioeconomic statuses, and women in a traditionally male dominated field.

Language Barriers. Participant 11, who works in an education ambassador role, expressed the impact of incorporating and engaging students who speak a different language with an educator that speaks their home language. They recalled bringing a Spanish speaking

coworker to an education event specifically for a gifted education program. Participant 11 said, “So, we were able to have an ESL [English as a Second Language] group in every class. That's awesome. Those kids clung to her.” Participant 11 also added, “I don't think that they'd ever had an experience where somebody came in and was like, let's talk about planets or let's talk about anything...let's do it in a language that you can understand so you can actually participate just like everyone else.”

Cultural Minority Groups. Participant 8 expressed the importance of having a gifted education program available to cultural minority students. Students in Participant 8's gifted program were bussed from local schools to a central location once a week for gifted education programming. Participant 8 said, “It gave me a huge insight into hanging out with other people that ... I wouldn't have been introduced to otherwise.” Participant 4 further explained the influence of the experience of spending time with other students and peers who were gifted. Participant 4 stated, “It can be such a big difference, especially [for] kids and students like myself that went to school in really, really low-income areas where there wasn't a high population of highly intellectual students.”

Women in STEM. Participant 11 emphasized the impact a woman in a male dominated field can have on students. “There are fields that women aren't represented in. Like, there are serious gender problems. And I realized that I could serve a purpose by going back and doing this [working in STEM] that like, it can be done.” They further explained that some female coworkers in Participant 11's office try to present themselves as feminine and professional, giving others the impression that science is not a career field for one type of personality type or gender. Participant 11 further added, “They're telling other little girls that yeah, sometimes I fire lasers that rocks and melt them to see what's inside.” Participant 2 reported seeing female role

models in medicine made them feel as if they would be able to handle work responsibilities as well as family responsibilities.

Self-Reflection and Negative Feelings

Several participants, upon reflection of their gifted education experience, expressed strong feelings attached to memories of their experience. Most of the experiences were positive, however some experiences affected participants in a negative manner. Some participants mentioned their participation in the gifted education program made them ambitious to a fault (Participant 14). Further, Participant 12 reported feeling they had disappointed their family and themselves when they were not the best of their peers at a specific task. Participant 12 stated, “That [being the smartest out of their peers] kind of was a contributor to my sense of self-worth. And that was wrong.” “I think it's a fine line between, like, challenging yourself and challenging yourself too much,” Participant 14 added. Alternatively, the experience of being in a gifted education program made some participants feel they were better than other students. Participant 6 said, “Sometimes my head had a hard time fitting through the door. And so [as an adult] I’ve really had to become very hyper aware of my ego. And that's definitely like mental learning.”

The analysis process took place over several weeks and required multiple passes of the data to create a thorough understanding of the experiences of the participants. Four major themes emerged from reoccurring ideas, phrases, and situations. The four themes were Gifted Program Experience, Career and Interests, Family Influence, and Social Emotional Influence. From each of the main themes, subthemes emerged to further illuminate the experience of the adult who is gifted and their career decision process.

Evidence of Quality

To validate the qualitative research in this study, the researcher followed three of Yin's four tests of validity (2018). These tests included construct validity, external reliability, and reliability (p. 44). To ensure construct validity, the phenomenon being study was defined as participation in and graduation from a gifted education program. Evidence was gathered from multiple sources and participants were able to review transcripts for accuracy. To ensure the study's findings were "generalizable beyond the immediate study," (p. 45) interview questions emphasizing the use of *how* and *why* were used. Finally, a detailed methodology chapter was developed in order to increase reliability and support future research recreation.

Summary

This phenomenological study was designed to learn more about the career choices of adults who are gifted, specifically why they choose to pursue or not pursue education as a career field. Chapter IV illuminated the experiences and feelings of graduates of a gifted education program in reference to career choice. Data were categorized and, upon further analyses, four themes emerged. Specifically, themes included program experience, careers and interests, influence from family, and the social emotional influence of gifted education programs on the participants. The following chapter includes the summary of and discussion of the results.

V. DISCUSSION

The purpose of this phenomenological study was to explore the career decisions of graduates of a gifted program. An individual who is gifted is described as an individual with a high IQ and unique talent or capability beyond the peer group (Callahan et al., 2017). Traditionally, a high IQ test score is classified as score of 130 or higher (Kermarrec et al., 2020). For the purpose of this study, a unique talent or capability is defined as skill or talent developed at a rate asynchronous to peers (Morelock, 1996).

Methods of Data Collection

Participants were recruited through social media, specifically Facebook and Instagram. Interested participants filled out a Google form collecting their email address and name. Participants were then directed to fill out a Calendly link. The first 25 participants to fill out the Calendly link were selected to participate. Due to scheduling conflicts, 20 individuals participated in the study. Interviews were conducted by the researcher. Data were collected through interviews via Zoom. All interviews were recorded and transcribed. After transcription, participants were able to confirm the contents of their transcripts, if needed. Data was then organized by category and reoccurring ideas. Further review of data produced four overarching themes.

Summary of Results

Overall, the data collected from the 20 participants revealed four main themes: Gifted Program Experience, Career and Interests, Family Influence, and Social Emotional Influence. More specifically, the data illuminated a small representation of adults who are gifted and their relationship with education as a career field. Fourteen out of the 20 participants reported working in some sort of education role, either as a traditional K-12 educator or a nontraditional educator. For the purpose of this study, a nontraditional educator was defined as a professional in their respective field who teaches or mentors in that field. Based on the data, it can be inferred that individuals who are gifted are interested in teaching or education as a profession. Nine participants reported working as a nontraditional educator. Several participants chose to pursue their career passions, as well as teach and encourage the next generation of professionals in their field. Participants reported feeling a strong love of learning and helping others, including a strong pull towards their specific passions, which translated into an education role.

Discussion

Gifted Program Experience

The experience of several of this study's participants aligned with this finding of Callahan et al. (2017) which indicated that elementary schools and middle schools were more likely to offer gifted education than at the high school level. Participant 2 expressed that elementary school had the most beneficial GPE compared to their middle and high school GPE due to the acceleration and enrichment available. The data collected and Callahan et al's (2017) findings shows that more resources and programming are needed for high school students who are gifted, beyond AP and Dual Enrollment classes. However, contrary to the majority of participants' feelings toward high school's gifted program experience, Participant 15 participated

in a service-learning component and seminar style lessons during high school, which they felt was beneficial to them professionally.

Congruent to Mun et al's (2021) study of parental perceptions of No Child Left Behind and gifted education, Participant 11 expressed the feeling as if they were not able to get appropriate services as a twice exceptional student. The study found the participating parents did not feel as if their twice exceptional children were receiving services for both of their child's exceptionalities. Participant 11 shared they were academically very advanced; however, due to their diagnosis of ADHD, they struggled in a classroom setting. They felt as if only one aspect of their educational needs could be met at a time. Participant 12 was misdiagnosed as a child with ADHD and was offered gifted education as an educational support service, as opposed to further testing to better understand Participant 12's other needs.

Participants reported participating in STEM programming through their gifted education program and having a strong draw to STEM fields, including STEM education. Eleven of 20 participants worked in a STEM related field. Several participants explained their interest in STEM was due to their experiences in their gifted education programs. Further, some participants credited their gifted education teachers as being the encouragers which propelled them in the STEM field. The encouragement and support from teachers reported by participants supports Şahin and Yildirim's (2020) findings stating that students who are gifted are more likely to be interested in a career in STEM after exposure to STEM materials and experiences.

Based on the findings of Callahan et al. (2017), to further enrich the Gifted Program Experience, programming should be consistently offered through the K-12 academic experience. Each student should be provided with consistent services and programming for all educational needs. Services and programming, while differing among schools, districts, and states, could

involve hands on learning experiences developed for learners who are gifted and based on appropriate skills. For example, high school students who are gifted could participate in a service-learning experience where they are able to work hands-on in a field they are interested in with a professional in that field who can provide technical support, as well as specific professional development. Şahin and Yildirim's (2020) findings showed that students exposed to STEM education are more likely to enter the STEM field. Students who are gifted and are interested in other fields should also be given the opportunity to participate in hands-on learning in their field of interest. Specifically, students who are gifted and interested in the traditional education field or a nontraditional education role, should be able to participate in hands-on experience specific to their unique interests.

Career and Interests

Rather than teaching in a traditional K-12 setting, some individuals in this study preferred to use their interest in educating others and their passion of their specific subject to further their area of interest. Ozcan (2017) stated people who are gifted are known to have a deep intensity and fascination with their area of interest. This study found adults who are gifted are likely to become highly knowledgeable in their area and share their knowledge with others in the field. Participants expressed having a desire to achieve and to know more, as well as help others and themselves grow and learn.

Participants 1 and 20 reported starting their own business when there was not a career, or career field, they felt was a suitable combination of their personal interests. This data corroborates the Persson (2009) study, which found that adults who are gifted and owned their own business, or held a leadership role in their career, reported high levels of job satisfaction. Participants 3 and 20 explicitly expressed their ever-rotating areas of interests. Several other

participants mentioned having many interests and options for a career. Jung and Young (2017) concluded students who are gifted may struggle with choosing a career field due to the student having many options that they would excel in, including general indecision. Further, the current study, as well as Perrson, as well as Jung and Young (2017), aligned with Gardner (1983), who determined people who are gifted may have a variety of talents and potential in different areas.

In an effort to support students who are gifted in developing their interests in the future, families and educators could encourage exploratory learning opportunities. Ozcan (2017) observed students who are gifted may have intense fascinations, which layers with Jung and Young's (2017) findings stating that students may struggle to select one field of interests due to a variety of interests. Based on the data collected and the shared experiences of participants, families and educators should support the exploration of multiple fields, as well as remind the student that is gifted that many careers and fields have not been discovered yet. The career landscape may shift before the time the student enters the work force. Students should be encouraged and supported in developing leadership and communications skills that are transferrable to many careers. In the classroom, teachers can support student-led instruction, specifically encouraging students to lead, share, and teach their classmates about their specific interests and passions, which supports with Persson's (2009) findings showing that individuals who are gifted are more satisfied in their career when they hold a leadership role.

Family Influence

Han (2018) found that, in countries where teaching is not considered a prestigious career, high achieving students reported less interest in working in education. Smith and Wood (2020) reported that people who are gifted may feel pressure to enter or not enter a certain career field due to a cultural standard or perceived norm. Participants in this study furthered Han's and Smith

and Wood's findings. Several participants expressed their interest in the education field but were encouraged by family or persuaded through personal experiences to choose a different field due to the unique challenges teachers in the United States face. Examples of these challenges participants in the current study mentioned were pay, government interference, and how teachers were treated at work and by their community. Participant 15 insinuated their parents were concerned they would work in the education field due to the low pay.

Meyer et al. (2021) concluded students who are gifted felt pressure to achieve academically from their family. Academic achievement might include attending an academically rigorous post-secondary program or academic achievement in general. Participants 1 and 13 expressed feeling pressure from family members to excel in school and pursue academic challenges. Participant 1 further added they felt like earning an A in a class was not good enough; their parents wanted them to overachieve. Participant 12 reported feeling pressure to be recognized publicly throughout their academic career, including in college to appease their parents. Participant 5 felt their parents created firm expectations early on that they would not only pursue a college degree but an advanced degree as well.

Jung and Young (2017) found that low-income students who are gifted were heavily influenced by family members. Participant 8 emphasized Jung and Young's finding by adding their personal experience with their family expectations about college. Participant 8 recalled there was never an option to go to college, but college attendance was simply an expectation that Participant 8 and their sibling would attend, even though their parents were not able to afford to pay for their college.

Following the findings of Myer et al. (2021) and Jung and Young (2017), families should be aware of the pressure placed on their students in the future. Han (2018) and Smith and Wood

(2020) found students who were gifted may also feel pressure from peers and society as a whole. Moving forward, families can support their student who is gifted by encouraging a wide variety of career and interest exploration, including noncollegiate options. Families can also encourage personal interest exploration and encourage their student who is gifted to explore options, including lesser-known fields. The student who is gifted should be supported in finding and pursuing their unique and varied interests.

Social Emotional Influence

Vreys et al. (2016) studied strength and needs of adults who are gifted. Findings from the present study closely aligned to Vreys et al.'s conclusions. Adults who are gifted may value challenge and opportunities to learn and improve, specifically the desire to be appropriately challenged in a field they are interested in. Several participants in the current study mentioned their desire to know and learn more. Participants also expressed having a drive to become an expert or the best in their own specific field. Participants 1 and 5 expressed their strong desire to be intellectually challenged, not limited to an academic or professional setting.

Smith and Wood (2020) and Stambaugh (2017) concluded that students, especially students who are gifted, are likely to become bored if they are not engaged. Participant 3 stated they enjoyed going to their gifted class because they did not have to "sit through [their general education] class bored". Other participants expressed their gifted education teachers were more energetic and engaging than other teachers. Participant 15 reported they became excited about learning because they had teachers who were excited about learning, and they excelled in those programs and classes as compared to their other classes. To further the intensified level of engagement in gifted classrooms, Participant 14 shared they felt their gifted classes were fun and made them like school. Participant 14 also shared when they were not in their gifted education

class, they felt bored and felt school was pointless. Aligned with the findings of Smith and Wood (2020) and Stambaugh (2017), Participant 12 reported feeling disappointed any time they had to return to their general education classroom. They reported realizing they did not enjoy school because they were unengaged and bored in their general education classroom, but rather enjoyed the hands-on, independent, and creative structure in their gifted education class.

Gomez-Arizaga et al. (2020) found students who are gifted may struggle to work with others in groups due to a variety of reasons, such as lack of expertise or input from other group members, intense personalities, or their desire for a certain level of perfectionism. Several participants in the current study reported struggling to get along with their peers, especially students in their general education class. Participant 12 reported feeling ostracized and, like their peers, did not understand them. Participant 1 also reported not feeling like a member of their general education classroom community until they were in high school and were only enrolled in Advanced Placement courses with a core group of other high achieving students. Participant 1 said, “I sort of became like more and more of an outsider”.

Students who are gifted may feel deeply and maturely, compared to other students of the same age. Gomez- Arizaga et al. (2020) found students who are gifted may have intense personalities, which may ostracize them from peers. Teachers should be aware of students who are gifted have unique personalities and create opportunities for supported social emotional learning, much like scaffolded academic content. Supported social emotional learning could look like role playing or journaling, as well as sharing about leadership, conflict management, and building and maintaining relationships. Students who are pulled out for gifted services should not be singled out or ostracized, rather they should be treated as an equal classmate who is part of the classroom community. Teachers, based on the research of Smith and Wood (2020) and

Stambaugh (2017), should implement gifted education strategies, such as hands-on and independent learning in the general education classroom to increase student engagement and minimize boredom.

Research Question

The goal of this research was to understand the experiences of individuals who graduated from a gifted education program and their career paths; specifically if the individual chose to include or exclude education in their career paths. All participants were over the age of 18 at the time of the study. Further, all participants were graduates of a K-12 gifted education program. The research question stated, “As a graduate of a K-12 gifted enrichment program, how did your experience in a gifted education program encourage you to include or exclude the education field as a career path?”

Study Limitations

All data collected were based on individual experiences. Time which has passed from the study interviewees’ participation in a K-12 gifted education program and personal biases, such as the influence of friends or family members experiences, may have influenced the participants’ answers. All participants were chosen due to their specific experience in gifted education. The participants in this study were a small percentage of the adult population who are identified as gifted. Due to the timeline and detailed nature of the study, 150 interested participants were not selected to participate. Each experience is different, unique, and may not be applicable to all adults who are gifted or have graduated from a gifted education program.

Implications for Future Practice

Kitsnatas et al. (2017) found students who were gifted were aware of their unique academic and social needs. Brown et al. (2020) emphasized the uniqueness of the adult-who-is-

gifted population and the need for the population to be studied further to know more about their specific perspective. Further implications for this research are in developing a richer understanding of adults'-who-are-gifted feelings and motivations and to develop programming to support the development of a person who is gifted. Specifically, the GPE for high school students needs to be developed to create a more holistic and beneficial learning experience, including hands-on learning experiences in specific interest fields, such as internships and service learning. More than 175 individuals were interested in participating in this study and sharing their experience. Gifted individuals may feel pressure from family and peers, as well as interpersonal pressure, to succeed academically, socially, and in their careers. This research showed that individuals who are gifted may choose to pursue education or mentor roles outside of the traditional classroom setting, specifically in their unique career fields. Gifted individuals have the tendency to become experts in their area of interest(s).

Recommendations for Future Research

Based on the findings of this research, further study of adults who are gifted is needed to better understand this unique population and their choice in careers. Specifically, future research should include the study of adults who are gifted and participate in a career change or move to a different field. A notable number of participants in this study expressed having a challenging time choosing a career or changing career paths multiple times. To better understand the population, which is known for having many diverse and intense interests, a mixed methods study with structured interview questions and a survey is recommended. Between 15 and 20 adult participants who graduated from a K-12 gifted education program and changed career fields at least once post high school graduation would be the sample representing the adult-who-is-gifted population. The interview questions should center around any specific events or people

that guided participants into a different career or field of study. Further, the quantitative aspect could delve into how often participants choose to leave a field and if there are any reoccurring events or feelings if they have changed career fields or fields of study more than once. Data on the level of education earned prior to and after the career field change and the time spent in each field should be collected, as well as demographic data to create a more complete view of this specific experience within the population.

Conclusion

Based on the theoretical framework of Howard Gardener's theory of multiple intelligences, adults who are gifted have many talents and opportunities for potential in a variety of areas. Based on the population sample of this study, adults who are gifted chose to use their talents in education roles that may or may not be in the traditional K-12 classroom. Out of 20 participants, 14 considered themselves to be an educator. Several other participants expressed interest in working in an educator capacity in the future. Aligning with prior research conducted with people who are gifted, data from this study exposed many contributing factors to career decision, including the four main themes in this study: Gifted Program Experience, Career and Interests, Family Influence, and Social Emotional Influence.

References

- About Brilliant NYC. (n.d.) *LearnDOE*. <https://learndoe.org/brilliantnyc/>
- Arizona State Legislature. (n.d.). *Gifted pupils; scope and sequence; annual funding*.
<https://www.azleg.gov/ars/15/00779-02.htm>
- Ayoub, A., Abdulla Alabbasi, A., & Plucker, J. A. (2021). Closing poverty-based excellence gaps: Supports for gifted students from low-income households as correlates of academic achievement. *Journal for the Education of the Gifted*, 44(3), 286–299.
- Boren, S. (2007). The Javits gifted and talented students' education program: Background and funding. *CRS Report for Congress*. https://www.everycrsreport.com/files/2007013198-909_05f6c8961a2018c8514ef2997bd8016c8cd3b4fe.pdf
- Boroughf, L. N. (2021). Empathy and understanding: The impact of gifted adults in the field of gifted education [ProQuest Information & Learning]. *In Dissertation Abstracts International: Section B: The Sciences and Engineering* (Vol. 82, Issue 8–B).
- Brigandi, C. B., Rambo-Hernandez, K., & Schwartz, J. (2020). First-generation students in rural communities: A study of effective programming components that support closing the excellence gap. *Gifted and Talented International*, 35(1), 3–15.
- Brookfield, S. D. (2009). Self-directed learning. In R. Maclean & D. Wilson (Eds.), *International handbook of education for the changing world of work* (pp. 2615–2627). Dordrecht, Netherlands: Springer.
- Brown, M., Peterson, E. R., & Rawlinson, C. (2020). Research with gifted adults: What international experts think needs to happen to move the field forward. *Roeper Review*, 42(2), 95–108. <https://doi-org.seu.idm.oclc.org/10.1080/02783193.2020.1728797>

- Callahan, C. M., Moon, T. R., & Oh, S. (2017). Describing the status of programs for the gifted: A call for action. *Journal for the Education of the Gifted*, 40(1), 20–49. <https://doi-org.seu.idm.oclc.org/10.1177/0162353216686215>
- Crabtree, L. M., Richardson, S. C., & Lewis, C. W. (2019). The gifted gap, STEM education, and economic immobility. *Journal of Advanced Academics*, 30(2), 203–231. <https://doi-org.seu.idm.oclc.org/10.1177/1932202X19829749>
- Creswell, J. & Poth, C. (2018). *Qualitative inquiry and research design choosing among five approaches*. (4th ed.). SAGE Publications.
- Department of the Interior (1918). Cardinal principles of secondary education: A report of the commission on the reorganization of secondary education, appointed by the national education association. Bulletin, 1918, No. 35. *Bureau of Education, Department of the Interior*.
- Flanagan, D., & McDonough, E. (2018). *Contemporary intellectual assessment theories, tests, and issues* (Vol. 4). The Guilford Press.
- Florida Department of Education (FLDOE). (n.d.). *Gifted education*. Exceptional Student Education. <https://www.fldoe.org/academics/exceptional-student-edu/gifted-edu.shtml>
- Florida Department of Education (FLDOE). (2017). *What is exceptional student education for children who are gifted?* What is Exceptional Student Education for Children Who Are Gifted? <https://www.fldoe.org/core/fileparse.php/7690/urlt/ESEGifted17English.pdf>
- Gagné, F. (1999). Gagné’s differentiated model of giftedness and talent (DMGT). *Journal for the Education of the Gifted*. 22(2). p.230–234. <https://doi.org/10.1177/016235329902200209>
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. *Basic Books*.
- Gifted & Talented Education. (2021) *California department of education*.

<https://www.cde.ca.gov/sp/gt/>

Gomez-Arizaga, M. P., Valdivia-Lefort, M., Castillo-Hermosilla, H., Hébert, T. P., & Conejeros-Solar, M. L. (2020). Tales from within: Gifted students' lived experiences with teaching practices in regular classrooms. *Education Sciences, 10*.

Grissom, J. A., Rodriguez, L. A., & Kern, E. C. (2017). Teacher and principal diversity and the representation of students of color in gifted programs: Evidence from national data. *The Elementary School Journal, 117*(3), 396–422. <https://doi-org.seu.idm.oclc.org/10.1086/690274>

Han, S. W. (2018). Who expects to become a teacher? The role of educational accountability policies in international perspective. *Teaching & Teacher Education, 75*, 141–152. <https://doi-org.seu.idm.oclc.org/10.1016/j.tate.2018.06.012>

Hodges, J., & Ottwein, J. K. (2021). Spending floors in gifted education services. *Rural Educator, 42*(1), 32–45.

Hollingworth, L. S. (1949). Children above 180 IQ Stanford-Binet; Origin and development. World Book.

Hornstra, L., van der Veen, I., & Peetsma, T. (2017). Effects of full-time and part-time high-ability programs on developments in students' achievement emotions. *High Ability Studies, 28*(2), 199–224. <https://doi-org.seu.idm.oclc.org/10.1080/13598139.2017.1332575>

Illinois General Assembly. (2005). *Article 14A. Gifted and talented children*.

<http://ilga.gov/legislation/ilcs/documents/010500050K14A-20.htm>

Jung, J. Y., & Young, M. (2017). Occupational/career indecision for economically disadvantaged high school students of high intellectual ability: A mixed-methods cognitive process model. *Psychology in the Schools, 54*(7), 718–735. <https://doi->

org.seu.idm.oclc.org/10.1002/pits.22023

Lupkowski-Shoplik, A., Behrens, W., & Assouline, S. (2018). Developing academic acceleration policies: Whole grade, early entrance, and single subject. *National Association for Gifted Children*.

https://www.nagc.org/sites/default/files/key%20reports/Developing%20Academic%20%20%20Acceleration_10-23-18.pdf

Kermarrec, S., Attinger, L., Guignard, J., & Tordjman, S. (2020). Anxiety disorders in children with high intellectual potential. *Cambridge University Press*.

<https://doi.org/10.1192/bjo.2019.104>

Kitsantas, A., Bland, L., & Chirinos, D. S. (2017). Gifted students' perceptions of gifted programs: An inquiry into their academic and social-emotional functioning. *Journal for the Education of the Gifted*, 40(3), 266-288. <http://dx.doi.org/10.1177/0162353217717033>

Kurt, L. J., & Chenault, K. H. (2017). Gifted and at risk: A cross-district comparison of gifted student growth and solutions for urban schools. *Penn GSE Perspectives on Urban Education*, 13(2).

Merriam, S. B., & Tisdell, E. J. (2017). *Qualitative research: A guide to design and implementation*. Langara College.

Morelock, M. (1996). On the nature of giftedness and talent: Imposing order on chaos. *Roeper Review*, 19, 4-12.

Morris, J., Slater, E., Fitzgerald, M. T., Lummis, G. W., & van Etten, E. (2021). Using local rural knowledge to enhance STEM learning for gifted and talented students in Australia. *Research in Science Education*, 51, 61–79.

Mun, R. U., Ezzani, M. D., & Yeung, G. (2021). Parent engagement in identifying and serving

- diverse gifted students: What is the role of leadership? *Journal of Advanced Academics*, 32(4), 533–566. <https://doi-org.seu.idm.oclc.org/10.1177/1932202X211021836>
- Meyer, M. S., & Plucker, J. A. (2021). What’s in a name? Rethinking “gifted” to promote equity and excellence. *Gifted Education International*.
<https://doi.org/10.1177/02614294211038988>
- National Association for Gifted Children & Council for Exceptional Children. NAGC-CEC Teacher Preparation Standards in Gifted and Talented Education. 2013. *National Association for Gifted Children*. <https://www.nagc.org/sites/default/files/standards/NAGC-%20CEC%20CAEP%20standards%20%282013%20final%29.pdf>
- National Research Center on the Gifted and Talented (2013). *Status of high school gifted programs*.
<http://www.nagc.org/sites/default/files/key%20reports/HighSchool%20GT%20Survey%20Report.pdf>
- New Jersey Department of Education. (2018). *N.J.A.C. 6A:8, standards and assessment*.
<https://www.state.nj.us/education/code/current/title6a/chap8.pdf>
- No Child Left Behind: A parent’s guide. (2003). *U.S. Department of Education*.
<https://www2.ed.gov/parents/academic/involve/nclbguide/parentsguide.pdf>
- Ozcan, D. (2017). Career decision-making of the gifted and talented. *South African Journal of Education*, 37(4). <https://doi.org/10.15700/saje.v37n4a1521>
- Persson, R. (2009). Intellectually gifted individuals’ career choices and work satisfaction: A descriptive study. *Gifted and Talented International*, 23(1), 11-23.
- Preckel, F., Schmidt, I., Stumpf, E., Motschenbacher, M., Vogl, K., Scherrer, V., & Schneider, W. (2019). High-ability grouping: Benefits for gifted students’ achievement development

- without costs in academic self-concept. *Child Development*, 90(4), 1185–1201. <https://doi-org.seu.idm.oclc.org/10.1111/cdev.12996>
- Press Office (2022). U.S. Department of Education Invited Applicants for Javits Gifted and Talented Program. US Department of Education. <https://www.ed.gov/news/press-releases/us-department-education-invites-applicants-javits-gifted-and-talented-program>
- Puryear, J. S., & Kettler, T. (2017). Rural gifted education and the effect of proximity. *Gifted Child Quarterly*, 61(2), 143–152. <https://doi-org.seu.idm.oclc.org/10.1177/0016986217690229>
- Renzulli, J. S. (2005). The three-ring conception of giftedness: A developmental model for promoting creative productivity. *The National Research Center on the Gifted and Talented*.
- Renzulli, J. & Reis, S. (2014). The schoolwide enrichment model: A how-to guide for talent development (4th ed.). *Routledge*.
- Rinn, A. N., Mun, R. U., & Hodges, J. (2020). *2018-2019 State of the states in gifted education*. National Association for Gifted Children and the Council of State Directors of Programs for the Gifted. <https://www.nagc.org/2018-2019-state-states-gifted-education>
- Sahin, E., & Yildirim, B. (2020). Determination of the effects of STEM education approach on career choices of gifted and talented students. *Malaysian Online Journal of Educational Sciences*, 8(3), 1–13.
- Smith, C. K., & Wood, S. M. (2020). Supporting the career development of gifted students: New role and function for school psychologists. *Psychology in the Schools*, 57(10), 1558–1568. <https://doi-org.seu.idm.oclc.org/10.1002/pits.22344>
- Stambaugh, T. (2019). Gifted students and mental health: The role of boredom, belonging,

- friendship, service delivery, and academic challenge. [Pro Quest Information & Learning].
In *Dissertation Abstracts International Section A: Humanities and Social Sciences* (Vol. 80, Issue 2-A (E)).
- Sternberg, R. J. (1998). Principles of teaching for successful intelligence. *Educational Psychologist*, 33(2/3), 65. <https://doi-org.seu.idm.oclc.org/10.1080/00461520.1998.9653291>
- Sternberg, R. J. (2011). The theory of successful intelligence. In R. J. Sternberg & S. B. Kaufman (Eds.), *Cambridge handbook of intelligence* (pp. 504–527). New York, NY: Cambridge University Press.
- Texas Association for the Gifted and Talented. (n.d.) Professional development. *Texas Association for the Gifted and Talented*. <https://www.txgifted.org/professional-development>
- Tomlinson, C., Kaplan, S., Renzulli, J., Purcell, J., Leppien, J., Burns, D., Strickland, C., & Imbeau, M. (2009). *The parallel curriculum: A design to develop learner potential and challenge advanced learners*.
- Tran, B. T. N., Wai, J., McKenzie, S., Mills, J., & Seaton, D. (2022). Expanding gifted identification to capture academically advanced, low-income, or other disadvantaged students: The case of Arkansas. *Journal for the Education of the Gifted*, 45(1), 64–83. <https://doi.org/10.1177/01623532211063936>
- Use of the WISC-V for gifted and twice exceptional identification. (2018). *National Association for Gifted Children*. https://www.nagc.org/sites/default/files/Misc_PDFs/WISC-V%20Position%20Statement%20Aug2018.pdf
- VanTassel-Baska, J., Hubbard, G. & Robbins, J. (2020) Differentiation of instruction for gifted learners: Collated evaluative studies of teacher classroom practices, *Roepers Review*, 42(3),

153–164. <https://doi-org.seu.idm.oclc.org/10.1080/02783193.2020.1765919>

van Rossen, J. M., Hornstra, L., & Poorthuis, A. M. G. (2021). High-ability students in pull-out programs and regular classes: A longitudinal study on perceived social relationships in two settings. *Journal of School Psychology, 85*, 1–16. <https://doi-org.seu.idm.oclc.org/10.1016/j.jsp.2020.12.007>

Vreys, C., Venderickx, K., & Kieboom, T. (2016). The strengths, needs and vulnerabilities of gifted employees. *International Journal for Talent Development and Creativity, 4*(1–2), 51–62.

Appendix A

Interview Protocol

Describe your experiences as a K-12 student in gifted education.

Tell me about your career path?

How did your gifted education influence your career choice?

How did your gifted education staffing team influence your career choice?

How did your family influence your career choice?

How did you determine to include or exclude the education field as a career path?

What else would you like to contribute to this study on gifted education and its influences on career choices?

Appendix B

Recruitment Flyer



The flyer is designed to look like a piece of white paper pinned to a light blue background with a white grid and dots. The title is written in large, pink, bubbly letters. The text is centered and uses a mix of bold and regular fonts. There are several pushpins (pink, orange, blue) pinned to the corners of the paper. The background has a light blue border with a white grid and dots. At the bottom, there is a light blue silhouette of a mountain range.

WERE YOU A STUDENT IN GIFTED?

Researchers from Southeastern University are looking for graduates of gifted programs to participate in a study exploring career decisions of gifted students.

Participants should be 18 years or older and a graduate of Gifted Enrichment Program.

**Interested in participating?
Fill out the form and the
researcher will be in touch!**

https://bit.ly/seu_gifted