

THE IMPACT OF IDENTIFICATION PRACTICES ON THE ENROLLMENT OF
ENGLISH LEARNERS IN GIFTED PROGRAMS

by
Kordney J. Govan

A thesis submitted to the
Department of Educational Leadership and Policy Studies,
College of Education,
in partial fulfillment of the requirements for the degree of
Doctor of Education

in Professional Leadership- Special Populations

Chair of Committee: Dr. Shawn Kent

Committee Member: Dr. Kristen Hassett

Committee Member: Dr. Lynn Gillman-Rich

Committee Member: Dr. Christal Burnett- Sanchez

University of Houston
May 2020

Copyright 2020, Kordney Jer'Mayne Govan

Acknowledgement

I would like to begin by acknowledging my friends, family, and colleagues for their unwavering support during my time in the doctoral program. There were countless hours of work, tears, and sacrifices that went into obtaining this degree. It certainly would not be possible without you all carrying me to the finish line. WE did it!

I would also like to acknowledge my committee members. I thank you all for your presence, support, and expertise throughout the development of the thesis. I thank you for challenging me and my ideas, and pushing me to be the best scholar that I possibly can. There's no way I would have seen the end without your valuable input and feedback. Best wishes to you all, and I hope our paths cross again in the future.

Abstract

Background: English Learners (ELs) are vastly underrepresented in gifted and talented (GT) programs compared to their peers in other mainstream populations. ELs are a growing population in the nation's public-school system. Although this population is seeing growth at a fast pace, the enrollment of ELs in gifted programming continues to lag. Existing methods of identifying students with gifts and talents rely on the use of standardized testing to measure general intelligence (Beyer & Johnson, 2014). Further, classroom teachers often serve as gatekeepers to gifted identification, with teacher nominations commonly used as a referral tool in the process. Given this, both the methods for evaluating students for GT programs and implicit bias on behalf of teachers can serve as a barrier to identifying gifted English learners. **Purpose:** The study examined existing gifted identification practices in Region 4 (R4) districts and their impact on the number of ELs identified for GT programs. RQs: 1.) What are current practices in identifying students for gifted programming among a sample of districts in R4? 2.) What are the differences in the percentage of ELs identified for GT programs using the various identification practices? **Methods:** Descriptive data from school districts in R4 and their GT procedures was utilized. R4 represents the Houston area and serves a diverse population of more than 1.2 million students. Fourteen school districts in R4 were identified as the sample for this study based on specific criteria. Data collected from districts about their use of various methods and processes to identify giftedness was described. Descriptive data provided a general overview of GT identification practices

within R4. Linear regression was used to analyze data. **Results:** Descriptive statistics showed that disparities existed in R4 in the percentages of both GT enrollment and ELs in GT. One-half of the sample has EL enrollment that ranges from 20%-40%. The sample relies heavily on the use of ability testing along with parent and teacher ratings. Variance was found in the utilization of achievement testing. A linear regression found that the percentage of ELs enrolled in a school district was significant in determining the number of ELs subsequently identified as GT. A second linear regression showed that the use of achievement testing did not have a significant impact on the number of ELs identified for GT. **Conclusion:** R4 has a disproportionate representation of ELs in GT programs. R4 struggles with meeting the needs of its largest sub-population, as GT enrollment is not indicative of enrollment trends of the region. Existing identification practices serve as a barrier for equitable representation in GT programs. School districts with high enrollment rates of ELs also saw higher rates of ELs in GT. Literature supports that the use of achievement testing measures the concepts its intended to, but fails to comprehensively identify giftedness in the various ways it may manifest. Expanding universal screening procedures is an implication for practice while further research should focus on the rate of language acquisition as a factor to determine giftedness in ELs.

Table of Contents

Chapter I.....	1
Introduction.....	1
Rationale.....	3
Problem of Practice.....	6
Impact of the Work.....	7
State/Regional Context.....	10
Variables.....	11
Research Questions.....	12
Chapter II Review of Literature.....	13
Defining Giftedness.....	13
Gifted Programs.....	15
Theories of Giftedness.....	16
English Learners.....	23
Identification Practices.....	24
Teachers as Gatekeepers.....	26
Other Underrepresented Populations.....	29
Identifying Gifted English Learners.....	30
Chapter III Methodology.....	38
Research Questions.....	38
Design.....	38
Sampling Plan.....	39
Data Collection Procedures.....	40
Measures.....	41
Analyses.....	42
Chapter IV Results.....	44
Introduction.....	44
Research Questions.....	44
Report of Findings.....	44
Chapter V Discussion.....	52

Discussion of Findings	52
Implications for Practice.....	59
Recommendations for Future Research.....	61
Limitations.....	62
Conclusion.....	63
Chapter VI Action Plan.....	64
Content.....	64
Format.....	65
Delivery.....	66
Presentation Process.....	68
Presentation Availability	71
Assessment/Evaluation	71
References.....	77

List of Tables

Table	Page
1. Identified School Districts in Region 4.....	40
2. Gifted Identification Practices by School District.....	43
3. Enrollment Data by School District.....	46
4. Gifted ID Practices Utilized by Sample.....	48
5. Professional Development Taxonomy.....	70
6. Guskey’s Critical Levels of PD Evaluation.....	73

List of Figures

Figure	Page
1. Scatterplot of Gifted ELs and EL Enrollment.....	49
2. Likert-Scale Survey about ELs.....	74
3. Likert-Scale Survey about Gifted Learners.....	75
4. Likert-Scale Survey about Diverse Populations.....	76

Chapter I

Introduction

Students who fill gifted and talented classrooms are far less diverse racially, socioeconomically, and culturally than the overall population of school campuses and systems across the nation (National Center for Educational Statistics [NCES], 2008). The everchanging world of education is occupied with so many subpopulations of students that meeting all of their needs becomes a direct challenge for educators. Students come from low-socioeconomic status households, various cultures, and countries from around the world, households where English is not the native language, and many other pockets of diversity. Across these many subpopulations, there is a specific group of learners facing challenges with having their intellectual and creative needs met. According to the National Association for Gifted Children, *giftedness* is defined as children having ability “significantly above the norm for their age. Giftedness may manifest itself in one or more domains . . . intellectual, creative, artistic, leadership, or in a specific academic field” (National Association for Gifted Children [NAGC], 2018, p. 1-2). Gifted and talented (GT) programming offers students the opportunities and experiences necessary for them to explore and accelerate their creativity through practices that couldn’t be adequately given to them in the general education setting. With dynamic pathways to identification, relevant supportive professional development, and disciplined inquiry, school systems can begin to see a remedy to this problem. Properly identifying and assigning students into programs that meet their needs is important work that must begin at a district level and flow down to the professionals closest to the action in the classrooms.

Implications of failing to represent the diversity of this population reach far beyond the boundaries of a classroom. Delgado and Scott (2005), argue that this problem is “not only because of their underrepresentation in gifted/talented programs but because of the long-term negative socioeconomic and educational consequences” (p. 199). According to UpSkill Houston, underrepresented minorities demonstrate higher rates of low educational attainment (Upskill Houston, 2015). For example, in Houston, 47% of Latinos, 32% of Native Americans, and 14% of African Americans do not have a high school diploma (Upskill Houston, 2015). Middle-skill jobs require more than a high school diploma but less than a four-year college degree. With these statistics in mind, there is a clear connection between education, access to jobs, and poverty. These implications support the need for improved learning outcomes for English language learners.

This study is important to school administrators, counselors, program directors, and teachers. School professionals are responsible for the identification and instruction of students in GT programs. Refined identification practices will create professional development opportunities for those professionals. This study is also important for English Learners (ELs) and other minorities that go underrepresented in GT programs in the public-school system. Inclusionary practices that benefit marginalized populations in gifted programming are imperative because minority students continue to make up a substantial portion of the public-school system. There are 5.3 million students enrolled in Texas public schools and 415,699 students in Texas are enrolled in GT programs (Texas Education Agency, 2018). There are a little over one million ELs in the state of Texas.

Of that, 30,988 (3%) are ELs who participate in gifted programming (Texas Education Agency, 2018).

The first steps in identifying giftedness in students begin at the campus level. Measures such as cognitive or intelligence testing are relied on heavily in the search for students with academic potential. Teachers often serve as gatekeepers to students' participation in gifted programming due to the use of teacher nominations and referrals within the identification process. School administrators, program directors, and educators often have misconceptions about ELs (Elhoweris, 2008). It is important to note that English acquisition is concerned with a student's linguistic ability instead of their intellectual ability. Outside of the mainstream procedures of identifying gifted students, the study plans to examine the need for training about the use of equitable measures in accurately identifying students from underrepresented subpopulations. As substantiated by intelligence research, many individuals can exhibit ability or giftedness in specific areas. Traditional assessments tend to identify general intelligence or ability, and many students with specific talents and abilities in other areas often can be overlooked using these methods (Friend, 2014). Essentially this work is necessary for improving equity in education for all student populations.

Rationale

The rationale for this work is supported by long-standing research on intelligence. Robert Sternberg is a psychologist with many contributions to the field of psychology, including his 1985 Triarchic Theory of Intelligence (Sternberg, 1985). Sternberg's theory focuses on three components of intelligence. Analytical intelligence is concerned with an individual's ability to evaluate information. Creative intelligence entails the ability of one

to invent, imagine, or predict. Sternberg describes practical intelligence as the last component of the triarchic theory. Practical intelligence necessitates the ability to apply and implement knowledge and skills in the real world. Sternberg's research supports the notion that intelligence can manifest itself in various ways and circumstances. In 1993, Robert Sternberg developed the Sternberg Triarchic Abilities Test (STAT). This test sought to assess the three components of intelligence described in his theory. The STAT test is a reliable tool to use in the assessment of learning outcomes based on the three components of the triarchic theory (McKay & Kaufman, 2013). Through research and a collaborative college admissions project, Sternberg found that students of different ethnicities performed just as well on the STAT as those students who were admitted into college using standardized admissions tests (McKay & Kaufman, 2013).

Further research took place in concurrence with Sternberg and his Triarchic theory. This research advanced the understanding of human intelligence. In the 1970s and 1980s, Howard Gardner, a psychologist, studied intelligence and developed the theory of multiple intelligences. Through his theory, Gardner asserted that individuals have eight intelligences that they draw on to use in various environments. The intelligences include verbal-linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist intelligence. Individuals may be stronger in one intelligence than others, but these intelligences often are not assessed or measured through traditional IQ tests and other cognitive measurements. This study aims to better understand the various contexts/processes of identifying giftedness and how they relate specifically to the number of EL students subsequently placed into G/T programs. {G/T or GT as above? Use the form familiar to your discipline and use it consistently.}

An additional theory of intelligence came from Joseph Renzulli. Renzulli crafted a theory of giftedness that precedes the intelligence research published by Gardner and Sternberg. Renzulli's three-ring conception of giftedness was originally published in 1978, but there have been many revisions and updates to the original work. Renzulli believed that intelligence is not to be thought of unitarily; based on Gardner's theory of multiple intelligences, we now know that intelligence is flexible and multifaceted (Renzulli, 2005). The three rings Renzulli believes work together to manifest giftedness are above-average ability, task commitment, and creativity. General ability and specific ability are the two types of abilities that Renzulli believes work together within above-average ability (Renzulli, 2005). Renzulli makes connections between how test scores and school grades provide a very limited view of an individual's ability. Renzulli's theory of giftedness allows us to see that a person's potential is not in cognitive abilities alone. Careful identification begins with moving away from total reliance on tests and defining intelligence and giftedness on an individual's ability to pass a test.

The most prominent theory of giftedness came from François Gagné and is referred to as the Differentiated Model of Giftedness and Talent (DMGT). The DMGT differentiates between the constructs of giftedness and talent. Through Gagné's model, giftedness is defined as the use and spontaneously exhibited natural abilities in one or more domains that surpass the abilities of peers of the same age (Gagné, 1985). Talent is designated as the mastery of developed abilities and knowledge in at least one domain that puts one's achievement in the upper 10% range of peers of the same age. The DMGT provides four domains of natural abilities: intellectual, creative, socio-affective, and sensorimotor. Gagné believed that gifts or natural abilities can be observed in every task

in which children engage during their education. Gagné delineates talents as fields in which children can develop their natural abilities. Included talents are academics, arts, sports, technology, and leisure (Gagné, 1995). The belief is that young children can leverage their gifts to exhibit these talents within various contexts.

The four pioneers of modern intelligence and their theories detail that intelligence is fluid and that specific gifts, talents, and abilities can be portrayed in various ways. Each theory agrees that interests, motivation, intelligence, and abilities should be observed and measured when determining if one is gifted or not. Standing on the foundation of this intelligence research, assessment tools and practices should be more dynamic and allow educators to view a child as comprehensively as possible. This study aims to align what is currently known about intelligence with identification practices that enable speakers of English and non-speakers of English alike to be identified and participate in programs that meet their individual needs.

Problem of Practice

Culturally diverse students are underrepresented in gifted programming compared to their peers in other mainstream populations. Underrepresentation can be attributed to the misalignment of instructional practices, identification procedures, and teacher biases (Ford, 1998). The underrepresentation of culturally diverse learners is a problem that many schools face. Moreover, the identification of minority gifted students by teachers is a need that newly structured knowledge can help meet. Many teachers have a general understanding of giftedness from their educator preparation programs, on the job training, and professional development. As the students in today's classrooms are changing, educators' thinking about these students and their capabilities must change as well.

Impact of the Work

Dynamic and flexible identification practices and measures could have an impact on the field of education for many reasons. A greater understanding of best practices in English as a Second Language (ESL) instruction, coupled with increased capacity on giftedness and intelligence can drive school systems to implement inclusionary practices that benefit non-mainstreamed populations, including ELs.

The changes that could occur if proposals in this study were adopted would directly impact currently unidentified ELs and the teachers who instruct them in the general education setting. Barriers to an equitable education could be removed for so many students who remain unidentified and underserved.

Gifted identification and universal screening are procedures that many school districts have adopted as policy. Policies influence practice within educational organizations. Typically, school systems screen for giftedness in students at the beginning of the school year. As a result of this study, schools could see the need to screen for giftedness at several benchmarks throughout the school year and undertake that challenge. This change would positively impact students with high-mobility rates as it would grant them the opportunity to be screened at any time of the year despite the campus they attend.

Additionally, other subpopulations of students will be impacted by the results of this study. Standing identification practices not only hinder ELs but other traditionally underserved populations as well. In fact, students with limited English proficiency are often dually represented in other marginalized subpopulations. Hispanic students,

African American students, ELs, and economically disadvantaged students are conventionally the populations that go underserved in gifted programs.

After the outcome of this study, educators at various levels will have opportunities to engage in professional learning. Through ongoing job-embedded professional development, educators can create professional learning communities that contribute to the refinement of skills and dialogue that produces improved learning outcomes for teachers and students. Lastly, schools and districts will have the capacity to implement program models that promote the inclusion of ELs.**National Context**

This study of the underrepresentation of ELs in gifted programming is guided by policy and legislation in the national context. The Every Student Succeeds Act (ESSA) makes advances in the field of education and seeks to increase access to an equitable education to every student in the country (U.S. Department of Education, 2015). More specifically, ESSA is important to this study because it upholds critical protections for America's disadvantaged and high-needs students. ESSA requires that all students be taught to high academic standards that prepare them for college and careers. Furthermore, ESSA helps to support local innovations, including evidence-based practices developed by local leaders and educators. What is important is that the mandates of ESSA begin to address the national concerns of the underrepresentation of minority students in gifted education programs.

The Jacob Javits Gifted and Talented Student Education Act of 1988 was originally part of the Elementary and Secondary Education Act but was recently reauthorized through ESSA. The Javits Gifted and Talented Student Education Act seeks to develop and support student talent across the United States. The Javits Act organizes

scientifically based research, innovative strategies, and other activities that enhance the ability of elementary and secondary schools to meet the special needs of GT learners.

This act also focuses its efforts on identifying and serving students who go traditionally underrepresented in gifted programs. Particularly, minority students, economically disadvantaged students, ELs, and students with disabilities are the beneficiaries of this education act. Even with the Javits Act in place supporting states and school systems across the country, the failure to identify and place underrepresented students in gifted programs persist.

The National Association for Gifted Children provides National Gifted Programming Standards for PK-12 gifted programs (NAGC, 2010). These national standards assist districts in their efforts of program evaluation. The framework of these national standards focuses on intended student outcomes, which can also assist districts in the implementation of services through gifted programming. Six standards guide the work of program evaluation and delivery of instruction as intended by NAGC. The standards consist of evidence-based practices in learning and development, assessment, curriculum planning and instruction, learning environments, programming, and educator professional development. These national standards coupled with ongoing national research will be helpful for increasing the identification of marginalized students.

Research findings support early identification of giftedness through cognitive tasks as an alternative measure in identifying gifted students. Delgado and Scott (2005), found that a high number of minority students were identified as gifted through an assessment using nonverbal cognitive tasks. The efforts of national legislation and current

research create a focus for the work within states to advance equity for all student populations.

State/Regional Context

The Texas Education Agency (TEA) has developed a Texas State Plan for the Education of Gifted and Talented Students (Texas Education Agency, 2018) Inside this plan, TEA outlines guidelines for districts across the state to follow in the education of gifted learners. The state plan has five sections: student assessment, service design, curriculum and instruction, professional development, and family-community involvement. Similar to the national guidelines, the Texas plan allows for school districts to assess and evaluate the effectiveness of their gifted education programs.

In the development of their strategic plans, school districts across TEA Region 4 aim to increase student achievement across all student populations. As part of my action plan, I desire to provide ongoing professional development in the area of gifted assessment, identification, and instructional strategies. This professional development plan is aligned with many districts' commitment to providing purposeful and relevant professional development for teachers. With a better understanding of the problem, effective identification practices, and increased teacher capacity, the region can begin to see improvements with student achievement. Since it was noted that systems wanted to increase student performance across all student populations, improved performance from students in gifted education will help with this goal. Through this study, I hope to discover effective ways to identify, retain, and educate the diverse learners that exist across the region. Identifying and meeting the needs of these culturally diverse learners is an urgent issue with much more work to be done.

Variables

Independent Variables. Current practices in gifted identification in Region 4 will serve as independent variables in this study. Gifted identification measures including, but not limited to, the following methods:

- Achievement Testing
- Ability Testing
- Teacher Rating Scale
- Parent Rating Scales
- Referral Windows

Parent and teacher referrals or nominations are typically the first stages in the gifted student identification process. Teacher nominations provide general education classroom teachers with a list of characteristics, behaviors, and academic abilities in which to nominate students who they feel display any of those characteristics.

Student portfolios are an additional measure that school systems use to identify giftedness. In many cases, student portfolios display a collection of student work to showcase their capabilities in domains that cannot be measured through the use of achievement tests.

Dependent Variable. ELs will serve as the dependent variable in this study. ELs are a rapidly growing population in Texas and the United States at large. Throughout this study, the number of ELs identified and enrolled in gifted programs will stand as the dependent variable.

Research Questions

1. What are the current practices in identifying students for gifted programming among a sample of districts in Region 4?
2. What are the differences in the percentages of ELs identified for GT programs using the various identification practices and procedures?

Chapter II

Review of Literature

ELs are a rapidly growing population in the nation's K-12 public school system. Although this population is seeing growth at a fast pace, the enrollment of English learners in gifted programming continues to lag. The study at hand chooses to look at existing identification practices for gifted programs and their impact on the number of ELs identified for GT programs. The literature review will focus on the screening and identification of giftedness along with best practices used in the instruction of English learners. Also included in the review are the various theories of intelligence that exist and program models that are succeeding at identifying and meeting the needs of gifted English learners. The study aims to increase educational equity for English learners and potentially offset the disproportionality that exists between ELs and their participation in gifted programs. To better promote understanding the context of this study, the review must begin with a definition of *giftedness*.

Defining Giftedness

It has become a challenge to isolate an exact definition of *giftedness* due to the many definitions that currently exist. Castellano & Matthews (2014) state that definitions vary because there is no federal mandate that requires school systems to identify and provide services to gifted students. Policies that govern GT programs are a part of rights held by individual states. Moreover, each state holds the right to craft a definition of giftedness for the school systems in the state. A consequence of this lack of uniformity is that a child might qualify for gifted services in one state but may not in another. The

irregularity that exists with defining giftedness further complicates efforts to serve English learners.

In 1972, the first federal definition of giftedness emerged. In the Marland Report, a gifted child is one who can perform at a high level. The Marland definition further explains that for students to qualify for gifted programs and services they must demonstrate high-level ability in one of five areas; intellectual ability, academic aptitude, creative thinking, leadership, and visual or performing arts (Marland, 1972). The National Association for Gifted Children (NAGC) defines *giftedness* as “when a child’s ability is significantly above the norm for their age. Giftedness may manifest itself in one or more domains such as; intellectual, creative, artistic, leadership, or in a specific academic field” (NAGC, 2018, p. 1-2). Texas defines giftedness as the exhibition in any child or youth of the ability or potential to perform at higher levels of accomplishment than that of peers of the same age. Similar to the NAGC, Texas expands its definition by stating that a gifted child is one who displays high capability in an intellectual, creative, artistic, or specific academic field or in leadership (Texas Education Agency, 2019).

In 2014, the most recent snapshot taken by the National Center for Education Statistics (NCES) reported that 6.7% of students in America were identified as gifted. The percentage is drastically lower for the EL population. During the 2018-2019 school year, there were precisely 436,442 students enrolled in gifted and talented programs across Texas (Texas Education Agency, 2019). Of those students enrolled in GT programs, 34,626 (8%) are students who have limited proficiency in English. Currently, there stands 1,055,172 ELs enrolled in Texas public schools, who represent _% of the total enrollment of Texas schools.

Gifted Programs

Service Models. Various gifted program models exist to educate students with identified gifts and talents. At both the federal and state levels, there is not a mandate that requires the use of a specific service delivery model. One of the most widely accepted and used program models for gifted education is a “pull-out” model (Beyer & Johnson, 2014). Students identified as gifted are placed in heterogeneous general education classroom settings from which they are extracted, or pulled out, out for the duration of the school day or a specified block of time in order to receive instruction along with other students identified as gifted. In addition to the pull-out model, the cluster program model is used to deliver services to gifted students. The cluster program model groups identified students together in the general education classroom, and a GT resource teacher or consultant comes into the classroom and provides additional or accelerated instruction to these gifted students (Beyer & Johnson, 2014). These two program models are widely used and sought after, not because of their effectiveness but simply because of their ease of implementation. These two program models have similar disadvantages in their implementation. Eby & Smunty (1990) list potential stigmatization, an elitist attitude among the participants, and a negligence in meeting the needs of gifted students completely as disadvantages of these two program models.

Curriculum Models. Three main curriculum models exist to help meet the needs of gifted learners: acceleration, enrichment, and individualized models. Acceleration models are built on the belief that gifted students learn at a rapid pace, thus needing to move through content units of study at a faster pace than the general education classrooms (Eby & Smunty, 1990). Examples of acceleration models include entering

early into other educational programs, skipping grade levels through double promotion, or taking high-level courses that are available to them (Beyer & Johnson, 2014).

Enrichment curriculum programs allow students to learn content in a compact time frame so that they may spend the remainder of their time extending their understanding through field trips, project-based learning, or maximizing other gifted behaviors such as leadership and visual-spatial skills (Beyer & Johnson, 2014). The last curriculum model used to serve gifted learners is an individualized curriculum. The individualized curriculum allows students to self-select topics of study and explore them through independent study.

The Jacob Javits Act of 1988 includes verbiage that encourages school systems in the country to develop and maintain programs and curriculum that address the diverse needs of gifted students. Further into this literature review, we look at program models that show promise in identifying and serving traditionally underrepresented populations in gifted programming. The development and implementation of these existing programs and curriculum models stand on venerable research and theories of giftedness and intelligence. As it stands, there is very limited research on the benefits or long-term outcomes for individuals participating in gifted programming.

Theories of Giftedness

Howard Gardner. In the 1970s and 1980s, Howard Gardner, a psychologist, developed the theory of multiple intelligences in which he asserted that individuals have eight intelligences that they draw on to use in various situations: verbal-linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist intelligence (Gardner, 1983). Individuals may be stronger in one

intelligence than others, but these intelligences are not often assessed or measured through traditional IQ tests and other cognitive measurements.

Gardner's theory is substantiated in evidence-based literature. In 2016, Ahvan & Pour conducted a descriptive correlation study to examine the relationship between multiple intelligences and the academic performance of a group of high school students. The results of this correlation indicated that the multiple intelligences had a significant positive relationship with academic achievement. With this understanding, we can deduce the importance of multiple intelligences as it relates to how intelligence is measured.

Understanding Gardner's theory of multiple intelligences allows connections to current definitions of *giftedness*. Although existing definitions do emphasize that students can show potential through intellectual ability, Gardner's theory aligns with current definitions in that the gifted child can exhibit giftedness in such areas as musical, spatial, and bodily-kinesthetic intelligences, which all contribute to a child's creativity.

Robert Sternberg. In 1982, Robert Sternberg conducted an experimental study that expanded the understanding of the use of intelligence tests to identify individuals as gifted. He concluded that tests only work for some people some of the time (Sternberg, 1982). The assumptions gathered from test data are true for a particular fragment of individuals tested, and those same assumptions could be true for none of the tested population. Sternberg's findings suggest that tests have a very restricted validity for every test taker and that validity then varies across those individuals (Sternberg, 1982). Sternberg goes on to argue that the use of test score formulas and scales results in an urgent problem in the under-identification of gifted children.

Sternberg furthered the understanding of human intelligence by publishing his 1985 Triarchic Theory of Intelligence (Sternberg, 1985), which comprises three components of intelligence: analytical intelligence, creative intelligence, and practical intelligence. Analytical intelligence is concerned with an individual's ability to evaluate information. Creative intelligence entails the ability of one to invent, imagine, or predict. Sternberg describes practical intelligence as the last component of the triarchic theory. Practical intelligence necessitates the ability to apply and implement knowledge and skills in the real world. Sternberg's research supports the notion that intelligence can manifest itself in various ways and circumstances. In 1993, Robert Sternberg developed the Sternberg Triarchic Abilities Test (STAT). This test sought to assess the three components of intelligence described in his theory. The STAT is a reliable tool to use in the assessment of learning outcomes based on the three components of the triarchic theory (McKay & Kaufman, 2013). Through research and a collaborative college admissions project, Sternberg found that students of different ethnicities performed just as well on the STAT as those students who were admitted into college using standardized admissions tests (McKay & Kaufman, 2013).

In 2001, Sternberg, Castejón, Prieto, Hautamäki, & Grigorenko. (2001) sought to study the structural validity of multiple-choice items included on the STAT. The authors wanted to confirm their belief that the three aspects of intelligence—creative, analytical, and practical—were correlated, yet distinct. A large sample of school-age children from a varied sample participated in the study. The results of the confirmatory factor analysis verified that the best fit model, as it relates to the structural validity of the STAT, is one

that assumes that the three aspects of intelligence exist. The structural validity of the STAT supports Sternberg's triarchic theory of intelligence.

Joseph Renzulli. Joseph Renzulli crafted a theory of giftedness that precedes the intelligence research published by Gardener and Sternberg. Renzulli's three-ring conception of giftedness was originally written in 1978, but there have been many revisions and updates to the original work. Renzulli believed that intelligence is not to be thought of unitarily; based on Gardener's theory of multiple intelligences, we now know that intelligence is flexible and multifaceted (Renzulli, 2005). Renzulli's conceptualization avows that giftedness is a culmination of intelligence, thinking styles, personality, the environment, and motivation. Looking at giftedness through this theory, one can determine that there is no ideal way to measure intelligence solely on the score achieved on an intelligence test.

According to Renzulli's theory, there exist two types of giftedness: schoolhouse giftedness and creative-productive giftedness. Renzulli states that schoolhouse giftedness is the most common type of giftedness identified in schools. Schoolhouse giftedness relies heavily on the measurement of a student's IQ and his or her ability to perform on cognitive and intelligence tests (Renzulli, 2005). Creative-productive giftedness is concerned with an individual's ability and potential to engage creatively at high levels of performance in a given domain. Scores received on a cognitive or intelligence test only account for a narrow proportion of an individual's ability.

The three rings Renzulli believes work together to manifest giftedness are above-average ability, task commitment, and creativity. General ability and specific ability are the two types of abilities that Renzulli believes work together within above-average

ability (Renzulli, 2005). General ability refers to abilities that can be applied across all domains, such as the ability to process information, the capacity to engage in abstract thinking, and the ability to integrate experiences and apply the appropriate responses in new situations. General abilities are often measured by tests. Specific abilities represent the capacity to acquire knowledge and skill or the ability to perform in one or more specific activities. Examples of specific abilities include ballet, math, acting, and sculpture. Specific abilities such as fine arts, leadership, and athletics are not easily measured with tests alone. These specific abilities must be measured through observation or other performance-based assessment procedures. Above-average ability is described as the higher potential that an individual has within any given area. Renzulli makes connections between how test scores and school grades provide a very limited view of an individual's ability. Renzulli does not intend for an above-average ability to be associated with one having the ability or potential to perform or create a product; instead, the observation of above-average ability is related to the manifestation of gifted behaviors.

Task commitment is closely connected to motivation. Renzulli sees task commitment as the energy one brings to complete a task or solve a problem. This second ring of task commitment can be linked to the following terms: perseverance, endurance, hard work, and self-confidence (Renzulli, 2005). In children, task commitment can be the ability to immerse themselves totally in a specific problem or area for an extended period of time. Third, creativity, Renzulli believes, is the originality of thinking and approaches to a problem that will aid in the manifestation of gifted behavior. Creativity, in this sense, is the potential for high levels of creative productivity.

Renzulli's theory of giftedness allows us to see further that a person's potential is not in cognitive abilities alone. Through his description of the theory, we can glean that educators and researchers must continue to broaden the understanding of this topic in order to increase the range of inclusion so that any child who has the potential to perform at high levels of creative productivity is not overlooked. Careful identification begins with moving away from the total reliance on tests and defining intelligence and giftedness on an individual's ability to pass a test.

François Gagné. The most prominent theory of giftedness came from François Gagné, whose concept DMGT differentiates between the constructs of giftedness and talent. Through Gagné's model, giftedness is defined as the use of spontaneously exhibited natural abilities in one or more domains that surpass the abilities of peers of the same age (Gagné, 1985). Talent is designated as the mastery of developed abilities and knowledge in at least one domain that puts one's achievement in the upper 10% range of peers of the same age. Gagné believes that talents are developed using gifts or natural abilities. Learning that is influenced by either internal or external stimuli helps to develop those gifts into talents. The DMGT provides four domains of natural abilities: intellectual, creative, socio-affective, and sensorimotor. Gagné believed that gifts or natural abilities can be observed in every task in which children engage during their education.

The DMGT established four categories or domains of natural abilities that are believed to be developed genetically. Intellectual abilities include processes such as reasoning, metacognition, or judgment. Creative abilities are categorized within an additional domain that includes imagination, originality, and a student's ability to be inventive. Socio-affective abilities are natural abilities in which perceptiveness,

communication, and empathy originate (Gagné, 1985). The fourth domain of natural abilities is sensorimotor abilities. Sensorimotor abilities contain sensitivities, strength, and endurance. Based on Gagné's theoretical framework, the aforementioned natural abilities can be nurtured into talents exhibited by school-age youth.

Gagné delineates talents as fields in which children can develop their natural abilities. Included talents are academics, arts, sports, technology, and leisure (Gagné, 1995). The belief is that young children can leverage their gifts to exhibit these talents within various contexts. It is important to note that certain developmental learning processes influence the development of talents. The absence of learning processes and practice, Gagné states, mean certain gifts will not translate into talents. Two factors that contribute to the success or failure of learning processes are intrinsic and extrinsic stimuli. Intrinsic catalysts such as personality, motivation, self-regulation, and perseverance can benefit the developmental processes needed for talent growth. Extrinsic catalysts are grouped into four categories that influence the development of talents. Culture, persons, activities, events, and experiences work together to foster talent in young children (Gagné 1995).

These four pioneers of modern intelligence and giftedness all support the notion that specific gifts and talents can manifest themselves in various ways. Each theory that was reviewed agrees that children's interests, intelligence, and abilities should be observed and considered in multiple contexts when determining if children are gifted or not. Although these distinguished theories provide evidence that intelligence should be measured comprehensively, current identification practices and procedures used in schools to identify giftedness are not adequately taking into account the numerous ways

in which a child can display intelligence. This study will consider inclusive practices to measure and serve giftedness in students.

English Learners

As the population of ELs has increased in American schools over time, this growth has caused a greater awareness in instructional practices along with models for service delivery related to the needs of students who speak languages other than English (Beyer & Johnson, 2014). ELs carry with them various traditions, norms, and cultural values from the countries from which they emigrate. The rich cultural heritage and languages that students bring with them have a direct impact on their learning of English in their new schools. Many teachers are ill-equipped to educate the vast differences that these students bring with them into the classroom, which ultimately leads to student frustration and failure (Beyer & Johnson, 2014). Leaving teachers untrained in best practices in EL instruction results in the academic, linguistic, and social-emotional needs of ELs being unmet.

Advancements made possible by immigration policies in the United States have caused an increase in the number of citizens migrating from other countries, thus shaping multicultural classrooms across the country. Callahan et al. (2016) state that English learners can be placed into one of three categories foreign-born immigrants, native-born children with immigrant parents, and native-born children of native-born parents who live in non-English speaking communities (Callahan et al. 2016; Kogan, 2001). A wider understanding of the social and cultural backgrounds of immigrant students and their families can better prepare educators and researchers meet the instructional needs of English learners.

According to the U. S. Department of Education's Office for Civil Rights (2015), there is not one specific program model or method of instruction for English learners that school districts are required to implement. School districts across the country are required, however, to provide "appropriate language assistance services" (p.15) and ensure that English learners have access to the general curriculum. The U. S. Department of Education Office for Civil Rights (2015) also mandates that school systems provide access to language learning and opportunities to participate meaningfully in special programs, services, and co-curricular activities, such as gifted and talented programs.

English learners come to America's classrooms from various places in the world, and school systems task teachers with providing them with an equitable and appropriate education. The inconsistencies and inequities presented in current gifted identification practices highlight the disconnect that exists between the U.S. Department of Education's requirement that English learners have access to and participate in gifted and talented programs and their actual limited participation in those specified programs.

Identification Practices

Existing methods of identifying students with gifts and talents rely on the use of standardized testing to measure general intelligence (Beyer & Johnson, 2014). Conventional methods of measuring intelligence focus on an individual's performance on a set of standardized tasks at the specific time the test is taken. No attempts to improve student performance are emphasized through these methods. Nevertheless, screening procedures used to identify gifted students should encompass a wide variety of measures and sources of information that draw on students' cultural, linguistic, and social backgrounds (Beyer & Johnson, 2014).

As previously mentioned, states reserve the right to create and govern policies involving GT programs and services. Consideration for gifted programs is outlined in local school district policies. Intelligence tests along with cognitive abilities tests serve as the first stage in identifying gifted students. Although intelligence and cognitive testing can measure intellectual ability, they can fail to identify children who demonstrate giftedness in other domains (NAGC, 2019). Callahan, Moon, & Oh (2017) outline the general process in which students are referred to and identified for giftedness. Typically, the identification process begins with a universal screening assessment given to an entire student body. The assessment used at this stage could be an achievement tests, cognitive ability instruments, and/or standardized or norm-referenced instruments. Students may also be referred for gifted testing by parent or teacher nomination forms. Data collected from any of the universal screening instruments listed above can be used to determine if a student qualifies for further testing. As the field of gifted education continues to expand, experts encourage school systems to use multiple data measures to determine a student's eligibility for gifted services (Callahan et al., 2017).

Generally, identification processes continue with more rounds of assessments or the collection and review of existing data on the student. Such data collected could include grades, input from parents/teachers, portfolios, and standardized test scores (Callahan et al., 2017). School staff could decide to make placement decisions for a student based on these outside data sources or other alternative measures of assessment. If a student does not meet minimum criteria for giftedness as determined by local school district policy, then a committee comprised of school and district personnel comes together to review data collected on the student to consider their placement in GT

programs. Although these practices assist with the identification of giftedness in children, not all of them provide equity for English learners.

Teachers as Gatekeepers

Teacher nominations are often used as a referral tool in the identification process. Elhoweris (2008) conducted a qualitative study to examine teacher perceptions of students of low–socioeconomic status (SES) backgrounds and how those perceptions impacted their referral of those students into gifted programs. Study participants were 207 elementary school teachers from a large midwestern city school district. The majority of the study’s participants were female, 83% of participants were white, and 41% of the participants include adults who were ages 46 years old and older. The instrument used was a study vignette. Vignettes that examine teachers’ educational decisions are used extensively in research (Frey, 2002). Included in the vignettes were nonidentifiable descriptions of students who would qualify for gifted education referrals. The vignettes also included descriptions of the students’ socioeconomic backgrounds. The participants were randomly assigned to two treatment groups, students from low-middle SES and students from upper-middle SES backgrounds. They were asked to read the vignettes and respond on a six-point Likert scale on their agreement with two statements. The statements were concerned with whether the teacher would or would not place the student in GT programs. The results showed that teachers were more likely to refer the students who were from the upper-middle SES background for gifted and talented services than students who were from lower-middle SES. Data also confirmed that teachers tended to place students in gifted and talented programs who represented the upper-middle SES than those students who represented the lower SES. These results help to answer the

question, does student socioeconomic status impact a teacher's perception for gifted education referral decisions?

Given that teacher referrals and nominations are an integral part of current identification practices, implicit bias on behalf of teachers and school staff can serve as a barrier to identifying gifted ELs. The bias described in teacher nominations supports this study's goal of determining the need for more equitable measures of giftedness.

Recurrent practices in identification incorporate the use of nonverbal tests to measure giftedness in students. A study conducted by Lohman, Korb, & Lakin (2008) sought to explore the validity of three commonly used nonverbal intelligence tests and their ability to identify gifted ELs. The authors' goal was to compare the results of a sample of ELs and native English speakers on the three nonverbal assessments. The instruments being studied were the Standard Progressive Matrices Test, the Naglieri Nonverbal Ability Test (NNAT), and the Cognitive Abilities Test (CogAT). The authors included 1,198 students in their study. Students were enrolled in grades K–6 across two elementary schools in a large Southwestern school district in the United States (Lohman et al., 2008). More than 80% of the ELs in the study were classified as continuing English learners, and this classification was determined by the type of services they were receiving at school. Almost all the ELs in the study were native Spanish speakers.

Trained professionals administered the three nonverbal tests and presented the test directions in both Spanish and English as appropriate. Each test was administered in a single session separated by one week. Once the data from the tests were collected, data were analyzed using a one-way analysis of variance and reported using descriptive statistics. The results of this study suggested that there were significant differences in the

performance of ELs and non-ELs on the three nonverbal assessments. The mean scores for ELs were significantly lower than the mean scores for the native speakers. For ELs, mean scores were 92 on the CogAT and 91 on the NNAT. Native speakers saw a mean score of 101 on both the CogAT and NNAT (Lohman et al., 2008). As for the Raven test, both groups had a mean score of 11 points higher than the other two tests. These data led to the conclusion that nonverbal assessments do not provide equal opportunities for students with limited English proficiency and limited educational opportunities. The authors noted some limitations to their study. Although they used a large sample of English learners, their sample was not representative of all English learners. The authors also felt that the need for a longitudinal study would better help them analyze whether the three tests serve as catalysts or barriers in identifying gifted ELs. While the administration of nonverbal tests is included throughout the gifted screening process, the study mentioned above provides reasons to include more dynamic and comprehensive approaches to screening students for specific gifts and talents.

Identification practices and procedures can vary across districts and states. Gubbins et al. (2018) conducted a qualitative study on the current district-level gifted identification practices. The researchers explored procedures, practices, and instruments used to assess and identify English learners for GT services. The researchers selected three states, nine school districts, and sixteen elementary and middle schools. District personnel who were most knowledgeable about identification practices were also included in this study ($n = 225$). These key professionals ranged from school administrators, gifted program coordinators and specialists, classroom teachers, parents/legal guardians, and school psychologists. Information about the three states

included in this study was not disclosed in the research article. The nine school districts selected served large populations of English learners. Surveys were administered and individual and group interviews were conducted about each district's practices of identifying students of potential according to the participant's defined role. After analyzing the transcripts from the face-to-face interviews, the researchers determined that there was a disproportion in the number of ELs identified as gifted across the three states. Although the three states reported similar identification practices for all students, no flexible practices were used to include ELs. The authors stated that alternative pathways to identification of ELs were needed to increase equity.

Other Underrepresented Populations

Standing identification practices not only hinder English learners but other traditionally underserved populations as well. In fact, students with limited English proficiency are often dually represented in other marginalized sub-populations. Hispanic students, African American students, English learners, and economically disadvantaged students are conventionally the few populations that go underserved in gifted programs. Ford & Whiting (2008) explain that the use of traditional IQ tests effectively identifies white students from a middle-class background. On the other hand, those same intelligence tests have been ineffective at identifying giftedness within the populations listed above (Ford & Whiting, 2008). Research cites inequities and biases that exist in standardized testing to be contributing factors to the underrepresentation of these groups. Ford (1998), argues that the use of norm-referenced tests is inequitable for minority students because the "norm" references white middle-class students. The normed sample does not reflect the backgrounds, experiences, economic status, and learning styles of the

diverse populations taking the tests, which decreases the validity and reliability of the test scores. Additionally, other barriers to identification and participation in gifted programs are related to teacher referral and access to advanced courses at the secondary level. As discussed previously, teacher referrals and nominations are innately part of the identification process. McBee (2006) studied the nomination and referral rates for students across racial and socioeconomic status. McBee found that teacher referrals were higher and more accurate for Asian and White students (16% and 10%, respectively), but the referral rates for African American and Hispanic students were much lower (4% and 3%, respectively). The author concluded that teacher referrals for gifted screening coupled with issues with intelligence tests are causes for the disparities that exist in gifted identification among minority students.

In sum, existing practices in identification do take a comprehensive approach to soliciting the greatest measurement of a student's capability and potential. The practices discussed above do not always provide English learners and other underserved populations with the greatest access to equity in gifted identification. As suggested in the cited literature, many school systems rely heavily on the use of standardized testing. This study hopes to recognize alternative pathways to identification that support all students.

Identifying Gifted English Learners

While inequities in identification procedures exist for many student subpopulations, there are a few models of identification implemented by school systems across the country that show promise in increasing the number of English learners participating in gifted and talented programs. In 2005, Delgado & Scott studied the use of cognitive tasks in the identification of gifted minority students. From previous research,

Delgado & Scott gleaned that very low performance on cognitive tasks led to students being at risk for being identified as having specific learning disabilities (2005). Delgado & Scott sought to consider if higher levels of performance on cognitive tasks would lead to identifying students with high levels of cognitive ability and giftedness. Moreover, the study hoped to see how many students with higher levels of cognitive ability would be minority students. The authors of this study chose to work with a sample of preschool children in order to determine if early screening and identification of giftedness resulted in the identification of gifted minority students.

The sample of preschool students consisted of 395 children enrolled in both public and private schools in the Miami-Dade County school system. The sample comprised Hispanic students (36%), Black students (39%), and White students (25%). The screening battery consisted of nine cognitive tasks. Six tasks within the battery were identification tasks in which students had to select the correct choice from a variety of choices offered. Three generating tasks were also included in the battery. These generating tasks allowed the students to provide verbal responses to questions and stimuli provided by the examiner (Delgado & Scott, 2005). Children included in this study were all tested individually in one single session by one of six female professional examiners. The cognitive tasks administered in this battery were given to students in English or Spanish, depending on the students' involvement in ESL (English as a second language) programs or their native language spoken at home. The screening battery included the following tasks: picture pointing, picture recognition, standard oddity, dot matrix oddity, sequencing, picture rhyme, word meaning, unstructured semantic information, and structured information.

Of the 395 students screened with the cognitive tasks, seven students with a high-performing score were indeed identified as gifted learners. These seven children were not identified as gifted when screened with the school system's measures of giftedness. Four of the seven children were Black, one was Hispanic, and two were White.

The authors discussed the limitations of this study. It was noted that the sample of children used for this study was primarily made up of minority students and recommended broaden the scope of demographics for a sample used in future research. Delgado & Scott suggest that others could find alternative assessment instruments should they follow the described methodology.

In Virginia, the Fairfax County Public Schools implemented a successful model of serving and identifying traditionally underrepresented populations for giftedness. The Young Scholars model emphasizes early identification; students' ability to reason and problem-solve; and assessments that go beyond ethnic, linguistic, and cultural norms (Horn, 2015). This inclusionary model aims to identify students who typically are overlooked by programs that depend exclusively on traditional methods of gifted identification. The Young Scholars model of talent development is a district-wide commitment with four major components that include principal/teacher leadership and collaboration, the use of nontraditional assessments, effective interventions, and professional development. Young Scholars embraced historically underserved gifted students, such as students from impoverished backgrounds, English learners, and twice-exceptional students.

The Young Scholars model begins with identification as early as kindergarten. A committee of school administrators, teachers, GT teachers, specialists, and professional

school counselors come together continuously throughout the academic year to assess students' strengths by observing students in various settings, reviewing student portfolios, and analyzing students' performance-based and nonverbal assessment results to ultimately find and develop Young Scholars (Horn, 2015). The Young Scholars model has a continuum of services from kindergarten to grad 12 to develop potential in identified students. The continuum of services is similar to a multitiered system of support. All students in grades K-6 receive level I services. Level I services consist of nine critical and creative thinking strategies that are taught through modeled lessons given by the GT teacher or classroom teacher. These creative and critical thinking strategies are aligned to state standards and can be used in any content area. Any student who demonstrates high levels of critical or creative thinking and who possess academic strength are then identified for level II services. Level II services are differentiated lessons in the student's specific area of academic strength. Level II services within this continuum also take place in kindergarten through grade six. After receiving level II services, some students continue on to receive level III services. Level III services are direct instruction and delivery of services to students in Grade 3-6. These services are delivered part-time by the GT teacher using differentiated curriculum designed to challenge students and allow them to think on a higher level about complex concepts and ideas (Horn, 2015). When students are promoted to middle school, they are then enrolled in honors courses directly related to their specific area of academic strength or interest. These level III services are continued in high school as well with enrollment in Advanced Placement, honors classes, and dual-credit courses.

With an emphasis placed on early identification, the Young Scholars model uses longitudinal studies to assess how successful the model is at accomplishing their two major goals: early identification and participation in advanced academics in high school. Each student is given a unique Young Scholars code that allows the school system to track identification, performance, and participation in gifted services. Horn reported data that represented the makeup of the Young Scholars levels of services. Fifty percent of the Young Scholars in K-8 receive level II services, 25% of them receive level III services, and 25% of Young Scholars are at the district's GT Center which is a full-time program taught using highly challenging curriculum and instruction each day. In grades 7-12, 78% of Young Scholars are in advanced academic classes or programs, while 75% of those students hold grades of As and Bs (Horn, 2015). For the 14 years that this model has been implemented, the Fairfax County Public Schools saw a 565% increase in the number of Black and Hispanic students who received gifted services and enrolled in advanced academics in high school. The Young Scholars model has been adapted and implemented by other school districts across the country who have also seen success in the number of traditionally underrepresented populations participating in gifted services.

A case study reported by Reed (2007) describes the approach that one school took to identify and serve English learners in Gifted and Talented Education (GATE) programs. In a middle school where more than 1,300 students attended, 62% of students were students whose native language was not English. The diverse population of English learners represented 37 distinct languages from various cultures and countries. With no English learners participating in the school's GATE program, the school sought to

contest the district's existing screening and request procedures that were more inclusive of students who made up more than half of the school's population.

The school district, like many others, relied heavily on the use of standardized testing as the main indicator of intellectual potential in students. Specifically, the school district used the Otis-Lennon School Ability Test (OLSAT) to measure students' cognitive ability to succeed in school, and its procedures prevented offering the OLSAT to any student who entered the district after second grade. The school sought to see how many of the English learners enrolled in the school's ESL programs showed potential for academic promise. To do this, the middle school opened OLSAT testing to a group of English learners who were selected by school faculty and showed high intellectual potential.

The school identified 16 English learners to take the OLSAT. Those 16 students took the OLSAT in the spring and had their tests scored by the district's Office of Testing to ensure fairness on behalf of the school. The results indicated that only six students showed intellectual promise based on the score of their OLSAT test. The committee appraised things that could not be measured by a test such as perseverance, rate of English acquisition, and diligence in class. Through this additional screening process, according to Reed, the committee members selected three more students whom they recognized as demonstrating academic promise. The nine students who were identified were offered placement in Social Studies, Algebra, or English GATE programs based on their level of English proficiency. All accepted. Another student was then added by the district after transferring to the school with similar results that attested to high levels of academic promise.

The ten students were all coded based on their English language proficiency levels. A-level students are any students who have very limited to no English proficiency. B-level students are students that acquired basic English in the domain of speaking and limited reading abilities. C-level students are students who have acquired basic interpersonal communication skills (BICS). The English learners identified for giftedness and placed in GATE courses demonstrated success in the more rigorous and challenging courses. The students were provided with language and academic support to help them thrive in their GATE courses. By the end of the year, many of the students used in this study held grades of As, Bs, and Cs in their GATE courses. In summary, this study showed the potential that educators have not only to identify but also to serve diverse gifted learners and that students with limited English proficiency have the potential, like many others, to demonstrate high academic ability (Reed, 2007).

The existing models of service delivery show promise for school systems attempting to meet the needs of diverse gifted students. The aforementioned examples indicate that students with limited English proficiency can have their gifts and talents identified and nurtured through dynamic identification practices and systems of continued support. Nonetheless, the literature presented in this review illustrates the barriers that face English learners in the gifted identification processes. Validated research on intelligence specifies that intelligence is a construct that manifests itself in various ways. Current intelligence tests, identification tools, and practices are often static and do not measure the wide range of abilities that diverse students possess. Biases in standardized testing and teacher nominations can prevent English learners and students from other subpopulations from accessing a more rigorous and engaging curriculum in schools. If

increasing equity is a goal for all stakeholders at every level, we must begin to shift our perspective and practices to enable all learners to develop and maximize their potential. By improving the representation of English learners in gifted programming, we can continue to meet the unique needs of diverse gifted learners while maintaining the high standards and rigor of existing gifted programs.

Chapter III

Methodology

Extant literature shows that this problem of practice exists at various levels, and researchers have made strides to improve the representation of English learners and other diverse populations within advanced academic programs. To begin removing barriers, increasing equity, and improving practice, we must acquire a clearer understanding of this problem at the local level. Identifying and describing existing identification practices within Region 4 were undertaken to allow this study to illustrate the extent to which the underrepresentation of English learners impacts our local region.

Utilizing publicly accessible school and enrollment data was the first step for collecting data. An analysis of the collected data on gifted identification procedures was meant to promote understanding the relationship between identification methods and enrollment percentages of English learners in gifted programs.

Research Questions

For clarity, both research questions are revisited here:

1. What are the current practices in identifying students for gifted programming among a sample of districts in Region 4?
2. What are the differences in the percentages of ELs identified for GT programs using the various identification practices and procedures?

Design

The study undertook a descriptive research design to illustrate the relationship between current identification processes and the number of ELs receiving gifted services. Descriptive data about urban school districts, in Region 4 and their gifted and talented

procedures were used in this design. The same data from urban school districts in Region 4 was used to determine if existing procedures show variances in the percentages of ELs in gifted programs. The proposed research design is linked to the research questions since the study will examine existing procedures and the impact, they have on inclusion of English learners in GT programs.

Sampling Plan

Region 4 is an area of public-school districts and charter schools in and surrounding the greater Houston area. Region 4 serves a diverse population of more than 1.2 million students enrolled in early childhood education through 12th grade. Among these students exists a wide ethnic distribution, including 759,881 economically disadvantaged students and 279,355 English learners. With many of its large school districts serving great numbers of English learners, Region 4 was identified as a suitable Education Service Agency (ESC) to use.

There are 48 independent school districts in Region 4, which vary in population demographics, and they are the target group for this study. School districts located throughout Region 4 operate in both urban and rural settings. These school districts serve populations of English learners along with providing services and programs to meet the intellectual and other needs of gifted students. Existing policies and procedures concerning the identification of gifted students and the delivery of services are sourced at the district level.

Used to narrow and select the final sample of districts for inclusion were data derived from the Texas Education Agency's Texas Academic Performance Reports (TAPRs) for the 2017-2018 academic year. To be included, school districts had to have

(a) at least 4,000 English learners enrolled in their school system and (b) information about the gifted identification procedures accessible through the district's website.

Fourteen school districts in Region 4 were identified that met those criteria (Table 1).

Table 1

Identified School Districts in Region 4 That Meet Study Inclusion Criteria

Districts ^a	English Language Learners	
	Number	Percentage of Total Student Population
Aldine	23,128	34.4
Alief	20,147	43.6
Alvin	4,181	16.9
Clear Creek	4,716	11.2
Cypress-Fairbanks	16,910	14.6
Fort Bend	11,854	15.8
Galena Park	7,130	31.6
Houston	67,347	31.5
Katy	13,118	17.0
Klein	7,924	15
Lamar	4,153	13
Pasadena	15,640	28.7
Spring Branch	11,785	33.7
Spring	8,640	23.9

^aAll districts are independent school districts; Lamar is a consolidated independent school district.

Data Collection Procedures

On the course of addressing the aforementioned questions, pertinent data was collected from various sources that allowed the study to describe the nature of gifted identification in Region 4. A Public Information Request (PIR) was submitted to the Texas Education Agency (TEA) to request specific enrollment data on districts in Region 4. Information obtained from the PIR included the total number of students enrolled in the public-school district during the 2018-2019 academic year. Also included in the PIR was the total number of students dually coded as English learners and gifted learners.

Including these two pieces of data helped to inform the study on the current number of English learners enrolled in gifted programs. The Public Education Information Management System (PEIMS) enrollment reports were accessed to collect more data. The total number of English learners enrolled and the total number of GT students enrolled was obtained through PEIMS enrollment trends made publicly available from TEA archives. Furthermore, data regarding gifted identification practices and the use of those practices were obtained from the sample school districts' respective websites. All data collected and analyzed in this study was pre-existing and is publicly available.

Measures

A gifted identification matrix was created to collect data on identification practices from the identified sample of districts in Region 4. The fourteen school districts, along with customary practices used in gifted identification, are listed in the matrix. Practices in the matrix are the use of achievement tests, ability testing, teacher nominations and rating scales, parent rating scales, and student portfolios (Table 2).

Data on identification methods from the selected sample were recorded and quantified in this matrix. Methods were coded with a checkmark if the measure was used in the district's identification process and a dash if the measure was not used in the district's identification process. The selected matrix, shown in Table 2, displays the ways in which each of the school districts identify giftedness in their students.

Another measure used in this study was the data accessed from PEIMS on the current enrollment of English learners participating in GT programs.

Analyses

Descriptive data were drawn from available records to present a general overview of the context within Region 4, and quantitative data was collected about the frequency of use for each of the practices used for GT identification and the percentage of GT students with a limited English proficiency. The percentage of GT students representing common race/ethnic groups will be reported for comparison.

Since each identification method was listed as an independent variable, a regression analysis was used to predict the impact that each method had on a desirable outcome of English learners identified for GT services. The study used regression analysis to quantify the number of methods used per district and to determine any relation to their enrollment of ELs in GT programs.

Table 2

Gifted Identification Practices by School District

School District ^a	Practices Used for Gifted Identification				
	Achievement Testing ^b	Ability Testing ^c	Teacher Rating Scale	Parent Rating Scale	Student Portfolio
Aldine					
Alief					
Alvin					
Clear Creek					
Cypress-Fairbanks					
Fort Bend					
Galena Park					
Houston					
Katy					
Klein					
Lamar					
Pasadena					
Spring					
Spring Branch					

^aAll districts are independent school districts; Lamar is a consolidated independent school district.

^bAchievement testing locally relies on such tests as the Iowa Test of Basic Skills.

^cAbility testing locally relies on such tests as the Cognitive Abilities Test and Naglieri Nonverbal Ability Test.

Chapter IV

Results

Introduction

The purpose of this study was to examine and describe the current gifted identification practices among a sample of school districts in Region 4, and determine what, if any, implications those identification practices have on the number of English learners subsequently identified as GT. Data collected to edify the study at hand included public data about school district student enrollment, gifted identification practices, and special program enrollment data. Descriptive data was provided to illustrate existing practices in identifying students for giftedness (RQ1). Several simple linear regressions were run to analyze collected data and help answer the second research question posed in this study.

Research Questions

There are two questions that drive the work of this quantitative study:

1. What are the current practices in identifying students for gifted programming among a sample of districts in Region 4?
2. What are the differences in the percentage of ELs identified for GT programs using the various identification practices and procedures?

Report of Findings

Prior to reporting the results of the data analysis, special program enrollment data and percentages will be described in the following section.

Table 3 displays numbers and percentages of pupils identified as ELs and enrolled in GT programs, together and respectively. Data provided in the table is essential to

understanding the composition of the sample. The total number of ELs enrolled in each district varies along with the percentage of ELs enrolled in GT programs. For most districts in the sample, the EL population makes up for a large percentage of the total student enrollment. Half of the school districts in the sample have ELs enrolled at rates ranging from 20% to almost 40%.

The percentages of students participating in gifted programs, across the sample, account for small proportions of the total student enrollment. School districts have percentages of GT enrollment ranging from as low as 4% to almost 15%. While ELs are represented largely in the total student population, they are identified and enrolled in GT programs at lower percentages. Specifically, all of the reported school districts show that the percentage of ELs enrolled in GT programs is lower than the percentage of total ELs enrolled in the district.

In studying the reported enrollment trends, a contrast is illustrated among school districts in the sample. The percentage of ELs in GT, for eight school districts, is less than half of the percent of total ELs in the district. This contrast between EL enrollment provides more context for the study and is considered for further analysis. Further analysis was conducted to determine if a significant relationship exists between the percent of total ELs enrolled and the number of ELs identified as GT.

The data presented helps to illustrate the nature of both English learners and gifted program enrollment throughout Region 4. The data discussed shows that within the sample, ELs are underrepresented in GT programs in comparison to their non-EL counterparts. With a clear understanding of the students enrolled in the mentioned

programs; the researcher will now be able to examine the practices utilized by the sample that results in the enrollment percentages described previously.

In the following section, data collected from the sample districts' websites will be presented and summarized to answer RQ1.

Table 3. Enrollment Data by School District

School District	Student Enrollment	Total EL	% of EL	Total GT	% of GT	% EL in GT
Aldine ISD	72,997	23,128	31.68%	2,917	4.00%	8.50%
Alief ISD	50,433	20,147	39.95%	2,075	4.11%	15.00%
Alvin ISD	27,382	4,181	15.27%	1,800	6.57%	5.30%
Clear Creek ISD	44,210	4,716	10.67%	4,554	10.30%	7.20%
Cy-Fair ISD	122,811	16,910	13.77%	7,151	5.82%	1.30%
Fort Bend ISD	80,089	11,854	14.80%	5,180	6.47%	1.80%
Galena Park ISD	23,799	7,130	29.96%	1,361	5.72%	23.40%
Houston ISD	226,181	67,347	29.78%	33,121	14.64%	16.50%
Katy ISD	84,212	13,118	15.58%	6,370	7.56%	5.10%
Klein ISD	56,655	7,924	13.99%	2,401	4.24%	2.20%
Lamar CISD	35,439	4,153	11.72%	2,777	7.84%	5.90%
Pasadena ISD	56,530	15,640	27.67%	2,825	5.00%	18.00%
Spring Branch ISD	37,082	11,785	31.78%	3,212	8.66%	6.00%
Spring ISD	39,779	8,640	21.72%	2,379	5.98%	15.50%

What are the current practices in identifying students for gifted programming among a sample of districts in Region 4?

After an analysis of gifted identification practices used among the sample, Table 4 describes the practices and how often they are used in identifying students for giftedness. These five practices are commonly used by most or all of the school districts. The values listed in the right column indicate the frequency or, in this case, the number of school districts in the sample who rely on these measures. In practice, achievement testing uses standardized assessments including those at the state and local level to measure a pupil's knowledge and skills. When identifying students for giftedness, school districts can use student performance data gleaned from the State of Texas Assessments of Academic Readiness (STAAR) exam, the Iowa Test of Basic Skills (ITBS), or any other achievement measures districts use within their system. Achievement testing showed to have the most variance in terms of the number of districts that rely on those measures to determine giftedness. With six districts that do not use achievement testing in their identification process and eight that do, the researcher will be able to conduct further analysis in the study. Ability testing, in practice, utilizes standardized assessments to measure a pupil's cognitive, language, or nonverbal ability in various situations. It has been found that all school districts in the sample rely on ability instruments such as, but not restricted to, the Cognitive Abilities Test (CogAT) and the Naglieri Nonverbal Ability Test (NNAT).

In spite of how a student is initially referred for gifted screening, data shows the sample employs the use of teacher and parent rating scales to collect more information about the student, their learning habits, and their characteristics. The use of an assessment

window was used largely by the sample. Eleven school districts utilize a referral and screening window and three do not. Traditionally, referral windows are open at the beginning of the school year. Many districts begin to accept gifted nominations and referrals only for the first month of school, while others will have a referral window lasting as long as the first academic semester. The school districts who do not rely on a window for referral, screening, or assessment operate their gifted identification process on a continuous basis throughout the academic year.

The data presented in Table 4 helps to answer the research question and describes the practices utilized by the sample. With these practices described, the researcher will be able to exercise a linear regression to determine whether one or more practices have a significant impact on the outcome of ELs identified as GT within the sample.

Table 4. Gifted Identification Practices Utilized by Sample

GT Practice	Frequency
Achievement Testing	8
Ability Testing	14
Teacher Rating Scale	14
Parent Rating Scale	14
Referral Window	11

What are the differences in the percentage of ELs identified for GT programs using the various identification practices and procedures?

A simple linear regression was run to understand if a significant relationship exists between a school district's enrollment of ELs and the percentage of ELs identified as gifted. The two variables were selected as it can be assumed that school districts with a

higher percentage of ELs would be better at serving and identifying students for academic potential and by nature, should have a greater percentage of EL students identified for GT programs. To assess linearity, a scatterplot of EL enrollment against the percent of EL identified as gifted with a model-fit regression line was plotted. After a visual inspection, the scatterplot indicated a linear relationship between the two variables. The regression model was statistically significant, $F(1,12) = 13.73$, $p = .003$. The two variables indicate a statistically significant relationship with $R = .730$ indicating a high-moderate relationship. The enrollment of ELs in a school district accounted for 53.4% of the variation in the number of ELs identified as GT with adjusted $R^2 = 49.5\%$, ($B = .576$, $p = .003$). This result indicates that for every 1% increase beyond the mean in ELs in the district, the expected increase in EL students in GT programs would be .58%.

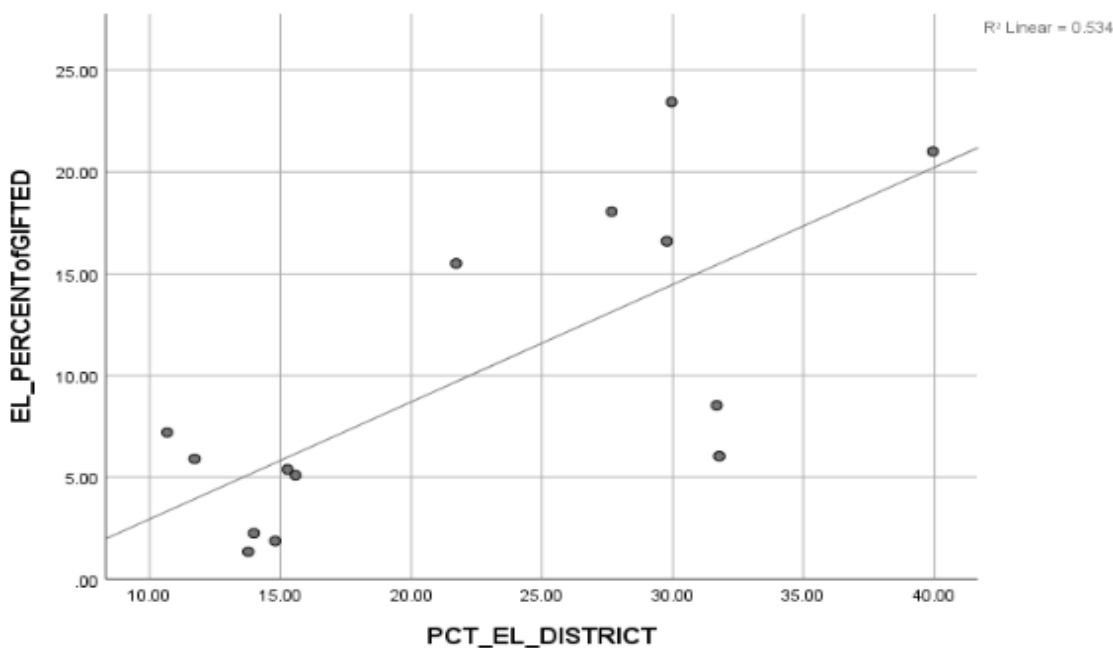


Figure 1. Scatter Plot of Gifted ELs and EL Enrollment

A second simple linear regression was run to determine if a significant relationship exists between the use of achievement testing and the outcome of ELs

identified for GT. Again, 57% (8/14) of districts employed achievement testing as an aspect of their GT identification process. The regression model was not statistically significant, $F(1,12) = 1.05$, $p = .326$ indicating there is no linear relationship between the two variables. The two variables do not show a statistically significant relationship with $R = .284$ indicating a low strength of the relationship. Achievement testing accounted for 8% of the variation in the number of ELs identified as GT with adjusted $R^2 = .4\%$, ($B = 4.137$, $p = .326$).

Lastly, a third linear regression was run to verify if the enrollment of ELs in a school district and the use of achievement testing, together, had any impact on the resulting percentage of ELs identified as gifted. With the enrollment of ELs and the use of achievement testing both serving as independent variables, the overall regression model was shown to be statistically significant, $F(2,11) = 7.26$, $p = .01$, indicating that a linear relationship exists between the independent variables and the dependent variable. The independent variables accounted for 56.9% of the variation in the number of ELs identified for GT with an adjusted $R^2 = 49.1\%$. It is important to note that, individually, the variables show some disparity between them. Within the model, the use of achievement tests was not statistically significant ($B = 2.771$, $p = .362$). The percent of ELs in a district was shown to be statistically significant ($B = .556$, $p = .005$).

Summary

The composition of the sample was clarified through descriptive data presented including special program enrollment. The data provided the researcher with valuable information about the status of EL enrollment in school systems and their enrollment in the respective districts' GT programs. As discussed earlier, ELs alone account for a large

portion of many of the school districts' total student population. These students are represented vastly throughout Region 4, yet are identified and enrolled in GT programs at percentages that are less than half of their enrollment in school district totals. GT enrollment across Region 4, represents smaller percentages of the entire student population which calls attention to the low participation of ELs in these already small populations.

Through descriptive data, the study was able to identify and describe the most common practices utilized by the sample school districts. Five common practices used in gifted identification processes along with their frequency of use was discussed. The data presented in Table 2 helped the researcher to answer RQ1. Further discussion of these practices and their use will be forthcoming.

Data was collected from multiple sources and analyzed to aid the study in determining if any factors included in the sample's gifted identification processes impacted the resulting number of English learners identified for gifted programs. Moreover, after conducting multiple linear regressions, the researcher was able to understand the significant relationships that exist between several variables in the study and the enrollment outturn of ELs in gifted programs. In summation, it was shown that the percent of ELs enrolled in a school system is strongly related to the output (i.e., percent) of ELs identified and serviced through gifted programs. The use of achievement testing in the identification process showed no relationship with the number of ELs that are ultimately identified as gifted. Data and analysis presented will allow the researcher to draw conclusions, make connections to extant literature, and discuss the need for further research.

Chapter V

Discussion

Introduction

At the onset, this study was purposed to understand and examine the underrepresentation of English learners in gifted programs. Moreover, gifted identification practices and their influence on the enrollment of gifted and talented English learners in programs were studied. This chapter includes a discussion of the major findings and their relation to relevant literature about English learners, gifted identification practices, and theories of intelligence. The discussion of findings will also help to develop implications for practice, limitations, and recommendations for future research.

The chapter contains a discussion of findings that answer the central research questions:

(RQ1): What are the current practices in identifying students for gifted programming among a sample of districts in Region 4?

(RQ2): What are the differences in the percentage of ELs identified for GT programs using the various identification practices and procedures?

Discussion of Findings

The goal of explaining the disproportionate representation of ELs in GT programs was accomplished through this study. With descriptive data that was provided and explained, the study was able to illustrate the landscape of gifted education in Region 4. A review of the data showed the percentages of total students enrolled in GT programs are low across Region 4. Disparities in the percentages of English learners enrolled in GT programs were also found. The study found that eight school districts in the sample had

GT enrollment rates for ELs at less than one-half of the percent of total ELs enrolled. These findings are concerning considering that the enrollment of ELs continues to rise throughout the state of Texas. Furthermore, these findings are important since the 1971 Marland report to Congress explains that GT program populations should be reflective of the overall student population including any subgroups such as ELs.

An additional finding from the descriptive data pertains to the number of English learners enrolled in a school district. From the data, we could glean that school districts with higher enrollment rates of English learners, ultimately had higher percentages of ELs identified for giftedness. Half of the school districts in the sample had EL enrollment percentages between 20% and 40%. A discussion of the relationship between EL enrollment and the subsequent identification of ELs in GT programs will occur later in the chapter.

A 2017 study effectively explained the disproportionate rates of gifted ELs throughout the state of Texas. Coronado and Lewis (2017) conclude that Texas struggles with meeting the needs of gifted learners. Specifically, 14 of the 20 regional education service centers fail to meet Texas' minimum requirement for GT program enrollment of 5%. As it relates to this study, the authors show that Region 4 has a moderate risk ratio of disproportionate representation for gifted English learners. Only three of the fourteen school districts in this study's sample have a total GT enrollment rate of less than 5%, while an additional four school districts narrowly surpass the 5% minimum. The findings from the descriptive data, along with existing literature, show that the under-identification of ELs in GT has been a persistent problem in Texas. Contrast exists among the sample of districts and their percentage of GT enrollment. This causes further

questioning around the fidelity and efficacy of the identification practices used in each school district.

Research Question 1: Identification methods. Descriptive data concerning gifted identification practices helped the study to find that traditional methods of identification of giftedness are commonly used throughout Region 4. The findings show that Region 4 relies heavily on the use of ability testing as well as input from parents and teachers to identify giftedness in students. All 14 districts studied used these measures in their efforts to recruit gifted students. Even with multiple uses of these traditional methods of identification by Region 4, a large enrollment gap continues to exist for ELs in the region. The majority of the sample utilized a referral window to screen and identify students with academic potential. When using a referral window, school systems are depriving students of the opportunity to display their potential as it develops throughout the school year. It was also found that variance existed among the sample in their use of achievement testing in gifted identification processes. A discussion of achievement testing and its impact on gifted ELs will be discussed.

Considering the findings presented, research has suggested that the use of teacher or parent referrals for giftedness may be ineffective. McBee (2006), claims that the utilization of teacher referrals, nominations, or rating scales are effective at identifying gifted students who come from mainstream populations and those who are traditionally represented in gifted programs. Although the research claims that teacher nominations effectively identify students who share similar cultural backgrounds, they are less effective at identifying students who come from culturally and linguistically diverse populations (Hodges et al., 2008). Moreso, the findings from this study coincide with that

of Elhoweris' 2008 study. Through her study, Elhoweris (2008) concluded that teacher bias was present when referring students for gifted services. The study's results showed that teachers were more likely to refer students to gifted programs that represented upper-middle class socioeconomic status than those who derive from low socioeconomic backgrounds.

Researchers in the field of gifted education have also studied the use of ability testing in identifying ELs for giftedness. Lohman, Korb, & Lakin (2008) found that the use of nonverbal abilities tests, such as the CogAT and NNAT does not level the playing field for ELs. The authors showed that ELs performed much lower than their non-EL peers on these ability measures. The 14 districts in Region 4 used ability measures such as those mentioned in the literature. Research provides evidence that these existing methods of identification serve as barriers for ELs and their participation in gifted programs.

Research Question 2: EL enrollment. After analysis, the study found that the percentage of ELs enrolled in a school district had a significant impact on the number of ELs consequently enrolled in GT programs. A high-moderate relationship exists between the two variables and the high enrollment percentages can be determined to be an important factor in identifying gifted English learners. As discussed earlier, half of the school districts in the sample have EL enrollment percentages that range from 20% to 40%. These same school districts have higher percentages of ELs identified as gifted learners. It can be presumed that school districts with higher percentages of ELs are doing better at identifying and meeting the needs of gifted English learners. A 2007 study further explores this presumption. Williams, et al. (2007) sought to understand why some

schools see their ELs perform higher on state standardized measures than those with similar concentrations of ELs enrolled. The authors used EL Academic Performance Index (API) scores to gauge how well ELs are performing in language arts and mathematics. The findings from this study asserted four factors that contribute to the variance in performance between the sample of elementary schools. Higher EL-API scores were achieved by schools that reported the use of assessment data to plan and drive instruction. The availability of instructional resources, coherent and vertically aligned curriculum for ELs and measurable and monitored objectives with a clear vision for student success were instructional practices that were highly correlated with schools that saw ELs perform higher on the state assessments. It is appropriate to consider that schools with high EL enrollment employ instructional practices that lead to higher EL achievement. However, Spring Branch ISD has the second-highest percentage of ELs in the sample, but only a small percentage of ELs identified as gifted. Removing barriers and improving learning outcomes for ELs cannot be the sole responsibility of those school systems with a high population of ELs. Work must be done to improve practice for all school systems servicing ELs. An insufficient amount of research exists that studies EL enrollment in school districts and its relation to GT program enrollment. This finding aims to call attention to the need for further research on the relationship between the two variables.

Achievement Testing The use of achievement testing is common practice in identification processes. Among the sample of districts in Region 4, variance existed in the number of districts that used this measure in their pathway to identification. The percentage of ELs enrolled in GT programs was not impacted by the use of achievement

testing in school districts. Since achievement testing was shown to have an insignificant impact on the number of ELs enrolled in GT, a question can be raised around its continued use in identification practices. Achievement testing is an impediment to success for so many student populations including ELs.

The use of achievement testing is supported through research from scholars in the field. Erwin & Worrell (2012) indicate that the use of achievement testing allows for educators to locate student strengths in the areas of reading, writing, and mathematics. Although achievement tests measure the constructs they are intended to, their use exploits the achievement gap that exists for minority and other underrepresented populations. Minority students who do not have the opportunity to develop these skills in which achievement tests measure, are likely to be unsuccessful in those assessments (Hodges et al., 2008). Additionally, school systems use cut-off scores for achievement tests, further placing underrepresented populations, such as ELs, at a disadvantage and making equitable representation in gifted programs much more challenging to realize. Achievement testing is helpful in determining student gifts and strengths in academic content areas, but Erwin and Worrell (2012) argue that it should not be the sole measure in identifying students for giftedness. Identification practices must be universal and allow students to demonstrate gifted potential and talent development. Giftedness can manifest itself in various ways and at various times in children, and educator practices must account for the fact that intelligence is not fixed nor unitary.

Intelligence A review of longstanding research on intelligence theories supports claims made in this study. Gardner, Sternberg, Renzulli, and Gagne all believe that intelligence is flexible, and that specific gifts, talents, and abilities can develop in varying

contexts. Gardner's theory of multiple intelligences firmly believes that individuals have eight areas of intelligence to draw from in differing situations. Certain intelligence may be stronger or more developed than others, but not all intelligence can be assessed or measured through traditional IQ tests or other cognitive measurements (Gardner, 1983). In conjunction with his own theory of intelligence, Sternberg asserts that tests only work for some people some of the time (Sternberg, 1982). Joseph Renzulli's conceptualization shows that giftedness is a culmination of intelligence, thinking styles, personality, and environment. Viewing giftedness through the scope of his theory, it can be determined that there is no effective way to measure intelligence solely on the score achieved on an intelligence test (Renzulli, 2005). Lastly, Francoys Gagne believes that talents are developed using gifts or natural abilities. Developmentally appropriate learning that is influenced by internal or external stimuli helps to develop those gifts into talents. These gifts and talents can be observed in every task that children engage in during their learning.

With an understanding of published theories by pioneers of modern intelligence, this study's results contend that children's interests, intelligence, and abilities should be observed and considered in multiple contexts when determining if one is gifted or not. Cultural backgrounds and norms should also be understood and used in a comprehensive approach to identification. Presented literature informs us that intelligence should be measured comprehensively, and current gifted identification practices studied in Region 4 inadequately take into account the numerous ways in which a child can display intelligence.

Implications for Practice

The findings from this study lead to three primary recommendations that will inform the practice of educators and scholars in the field. Universal screening procedures, alternative pathways to identification, and professional development are recommendations brought forth from this study. These recommendations are vital for all professionals involved in the screening, identification, and placement of gifted ELs in programs. The first recommendation involves the need to adopt universal screening practices for students across grade levels. As shown, existing identification practices do not generally result in adequate identification of EL students for GT programs. With the understanding that giftedness can manifest itself in various ways and at different times for children, expanding gifted screening procedures across grade levels will allow practitioners to proactively identify students at any grade level with or without a referral from a parent or teacher. As a part of universal screening procedures, educators can support ELs by selecting assessment tools that are culturally sensitive and consider the language differences among students (Gubbins et al., 2018). Also, developing measures and processes that assess the rate of language acquisition for ELs can inform educators how well ELs are mastering reading, writing, and mathematics skills in English (Gubbins et al., 2018). Adopting universal screening procedures means developing an identification model that relies on multiple sources of data to comprehensively assess the whole child for academic potential.

Alternative pathways to gifted identification fall under the umbrella of universal screening procedures. Alternative pathways suggest the combined use of traditional and non-traditional identification practices. When available, it is recommended that

practitioners use ability and achievement tests in students' native language as an indicator of potential giftedness. It is recommended that multilingual School Psychologists administer these tests to students in their native language, when available (Gubbins et al., 2018). If school systems are flexible in their alternative methods and criteria for identification, ELs and other underrepresented populations can begin to see a leveled playing field. As another alternative practice, educators can leverage the use of formative assessment to monitor student development and progress. Informal assessments, observations, and anecdotal records kept on students provide multiple opportunities to ascertain student learning and progress. Lastly, in an effort to utilize alternative pathways to identification, school systems could pilot a preparation program that provides students with learning opportunities to develop their knowledge and skills before formally being screened and assessed for giftedness.

Despite the total enrollment of ELs that a school district has, universal screening coupled with alternative pathways to identification will allow school systems to better serve gifted ELs.

Stakeholders, at every level, who are involved in the screening, identification, and placement of students in gifted programs could benefit from professional learning opportunities that engage them in the nature and needs of gifted learners. Leveraging professional development opportunities on the topic of ELs and best practices in English as a Second Language (ESL) instruction would help educators meet the language acquisition needs of these students. Parents of ELs would also benefit from workshops on identifying giftedness in their students and characteristics that gifted ELs would exhibit. Effective use of rating scales and nomination checklists for parents and teachers would be

another advantageous learning opportunity. The impact of teacher professional development has been studied by researchers in the field. Johnson, Kahle, & Fargo (2007) conducted a longitudinal study on the impact of long-term, whole-school teacher professional development, and the lasting effects it had on student achievement. The authors found that all students, majority, and minority, showed an improvement in their performance on local standardized assessments over the two-year span of this study. Professional development can be used as a vehicle for change. Aside from purposeful professional development, stakeholders could learn the importance of employing a diverse composition of educators to advocate on behalf of ELs. These recommendations have a goal of ensuring equitable opportunities to participate in special educational experiences provided in gifted programming.

Recommendations for Future Research

To expand on the findings from this study, further research is recommended on this topic. Research and analysis of what is working in identifying gifted ELs should be studied further. A review of those practices positively impacting the identification of gifted ELs could be discussed and recommended for practice. Moreso, providing more complex and descriptive data on ELs and who they are will allow researchers to better understand this population and how to better serve them. As an example, studying the native language, cultural norms, family structures, and generational differences are some variables that could be studied to provide a better elucidation for this special population. Gubbins et al. (2018), suggest the need to further research the speed of English-language acquisition and code-switching by ELs as a way to measure gifted potential. As ELs

develop their language skills, they start to become successful in their academics which in turn allows their giftedness to be portrayed.

Since it was discussed earlier that disparities exist among each of the sample's GT enrollment, a need exists for further research on the fidelity of identification practice utilization. Additionally, further study is suggested on how the various identification practices are calculated and weighed when making GT program placement decisions for ELs and non-ELs alike.

Limitations

This study included limitations that impact the results and discussion. First, only quantitative data were used in developing this study. A mixed-methods approach would likely yield additional results. Qualitative data from school districts could provide more insight into what their identification practices look like in action. It is quite possible that a wider variance in the application of these practices would be seen. Identification practices are not the sole factors that contribute to underrepresentation for ELs. A fishbone diagram was completed at the onset of this study, and it was revealed that a lack of teacher training on gifted identification, assessment measures, variations in performance, and teacher bias were all factors that contributed to the underrepresentation of ELs in gifted programs. Those factors, in relation to identification practices, should be examined further to provide more clarity on this issue. Another limitation of this study is its sample size. It is hard to make generalizations about the entire region while only studying 14 school districts. This study is additionally limited by its location. Considering that Region 4 is an education service center in Texas, it would not be appropriate to generalize these findings beyond the state of Texas.

Conclusion

The proportional representation of ELs in gifted programs is a pressing goal, worth working toward, in the fields of gifted and ESL education. English learners represent a large population of K-12 students in this country, but more specifically in this state and region. Dismissing the needs of this robust population and preventing them from access to gifted services and programs is morally reprehensible since enrollment trends continue to show an increase in the number of ELs in our public schools. Findings from this study prove that ELs are vastly underrepresented in GT programs and that existing identification practices contribute to this blatant underrepresentation. Shown, was evidence that supports the need to comprehensively search and screen students for giftedness, taking into account the many ways giftedness may manifest in children. Recommendations for practitioners included universal screening procedures to ensure that all students are screened for giftedness at each grade level to allow for gifts and talents to develop. Alternative pathways to identification such as academic preparatory programs were recommended for practice. Looking forward, researchers should focus attention on evaluating practices that effectively identify gifted ELs and examine the population closely to better suit their needs. I am fully aware that equitable representation in gifted programs will not occur overnight, next week, or next year, but this should not dishearten researchers and educators from refining their practices and continuing to find solutions. Our children deserve better.

Chapter VI

Action Plan

Introduction

The work needed to improve the learning outcomes for English learners (ELs) will require training and the refinement of skills from stakeholders at every level. All stakeholders will have roles and responsibilities outlined later in the action plan.

Although the process of gifted identification begins at the campus level, there are usually policies and practices at the district level that shape how campuses facilitate gifted identification. One actionable goal of this study is to increase teacher capacity on giftedness, identification of giftedness, and best practices in English as a Second Language (ESL) instruction. In order to do this, I plan to develop and deliver Professional Staff Development (PD) to individuals who work directly with English and gifted learners.

Content

The content covered during the professional staff development will include an understanding of giftedness and characteristics of gifted learners. Although educators in the state of Texas are required to have 30 hours of initial training on gifted learners at the start of their careers, many educators still require updates and new knowledge in working with this specific population. Content of the professional development will also include curriculum/program models for gifted students and a refined understanding of the various identification practices that exist. As we know, the students in our schools have a variety of needs. Some of these needs are more challenging than others to meet. Therefore, classroom teachers and other educators need explicitly targeted professional development

opportunities to refine their knowledge and pedagogies to meet the needs of today's diverse learners. Darling-Hammond (2017), defines professional development as structured learning opportunities that consequently lead to changes in teacher capacity or understanding, improved practices, and improvements in student achievement. Lastly, content will cover diversity training where various cultural norms will be explored and explained in an educational context. If teachers are aware of the cultural norms of their students and how those norms impact educational performance, teachers will be able to better serve their students and identify their learning needs.

Format

The format of the structured learning opportunities will include a blend of training and an ongoing improvement process across the entire school system. The intent of using training in professional staff development delivery is to exchange information and knowledge that leads to the development of new skills. Training will take an in-service approach while using direct instruction to facilitate the learning that takes place. Implications for using training in practice are improved student achievement and improved teacher knowledge and skills. When using training as a method for professional development, we assume that the knowledge and skills learned are worthy to be replicated. The work intended by this study cannot take place during a single-shot training that is only held once. Embedding learning and staff development through an ongoing improvement process will allow systems to monitor changes as they take place over time and tailor future innovations to the specific needs of its campuses. Through an improvement process approach to staff development, we will be able to take the knowledge and skills learned in order to participate in critical decision making on our

campuses such as gifted identification. Through this improvement process, systems can develop an enhanced curriculum and assessment measures for the target population.

Lastly, through an improvement process approach, this plan seeks to take research and turn it into improved teacher performance in the classroom. Essentially, this PD should be aligned with the goals of the entire school system in regard to gifted identification and English learners. Having this alignment prevents any inconsistencies when it comes to campus goals and priorities.

Delivery

Intended Audience. Classroom teachers generally are the first professionals involved in identifying students with gifts and talents. Seeing as teacher nominations and referrals serve as gatekeepers to student participation in gifted programs, they are the main target audience for these structured professional learning opportunities. At the system level, target audiences will include district-level leaders such as curriculum, ESOL, gifted, and special education program directors. Campus-based audiences will include school principals, assistant principals, professional school counselors, instructional coaches, program facilitators, other specialists, and teacher leaders. At the campus level, teacher leaders will be identified and trained as “experts” to better support other school staff throughout the ongoing improvement process.

District-Level Leadership. The described leaders at the district level will participate in the ongoing professional development process. It is critical for these leaders to attend the training since they have responsibilities within their positions to impact change at the campus level. District leadership will support the campuses and their administrations by providing relevant professional development materials,

communication, and resources to support the goals and priorities set in this plan. District leadership will also ensure that all stakeholders have access to all data that promotes student success.

Campus Leadership. It is important to note that the needs of every campus are different, so that should be taken into consideration when determining the professional development needs of each campus. The school administration will have the responsibility of creating an organizational culture that is supportive of professional learning. Campus leadership will also have the responsibility of supporting the use of Professional Learning Communities (PLCs) to ensure that teacher teams use appropriate sources of data to drive instruction and make collective changes in practice. Lastly, campus administration will monitor progress and provide recommendations to improve both gifted and EL programs based on contextual data and information. Campus principals, assistant principals, and other members of the campus instructional leadership team should remain a resource for the professionals on their campus who work directly with gifted screening and ELs.

Instructional coaches, specialists, and teacher leaders are tasked with the responsibility of ensuring effective implementation of the approaches that take place at each school and in each classroom. As part of the coaching process, instructional coaches will collaborate with campus teachers to facilitate the collection and analysis of data while modeling data-driven decision making.

Through this ongoing professional development, classroom teachers gain the most knowledge and skills to enact the change anticipated in this study. Teachers will analyze appropriate student data to monitor and adjust school and classroom improvement

strategies. Teachers will also participate in PLCs to continue sharing learning experiences and resources that support the goal of improving equitable practices for all student populations.

Presentation Process

Professional development should always be aligned to district strategic goals and initiatives, and the identified needs of students, teachers, and leaders. The design of the intended professional development will include opportunities for active learning and engagement, relevant modeling, and reflection. Ultimately, the PD will lend itself to a learning exchange that supports a change in participant knowledge, skills, perspectives, and practice.

Throughout the school year, time is limited due to the number of other duties and responsibilities that professionals must carry out. The times for this professional development are intended to be flexible in order to meet the needs of the intended audience and specific campuses. The following are proposed times that PD could take place:

- During special summer workshops,
- Early dismissal days,
- District staff development days,
- Before or after the school day,
- Planning/conference periods,
- Cadres,
- Professional Learning Communities, or
- Full workday in-services.

The process of the proposed professional development will follow a Professional Development Taxonomy. Tucker (2013), developed the taxonomy as a way to plan and outline learning goals and implementation. This taxonomy also incorporates a progression of professional development learning activities. There are five phases of this taxonomy where adult participants can plan their learning, measure progress, and evaluate results.

Table 5

Professional Development Taxonomy

Phase One Build Knowledge	Phase Two Develop Skills	Phase Three Apply to Practice	Phase Four Improve Results	Phase Five Extend Impact
<p>During this phase, participants will develop their understanding of the topic. The acquisition of knowledge happens here. Participants will gain a deeper understanding of the topic and the guiding theories, principals, and research behind the topic and how it informs teaching.</p>	<p>Phase two is concerned with the development of skills and the “how” to implement the new knowledge/learning taking place. A focus is placed on the skills and processes necessary to apply their understanding of the topic.</p>	<p>This phase prepares participants to implement the new skills they’ve learned and to refine their practices. It is important to note that this phase is the initial stages of implementation in the classroom. It is important to allow educators to experiment and learn from their application of new skills. At no point during this phase should a high-stakes evaluation tool be used to monitor and evaluate teacher effectiveness. The aid of an instructional coach could be useful during this phase as well.</p>	<p>Phase four typically takes place in groups. During this phase, collaboration is key to reflect on practices and to continue the refinement of those skills and practices. Assessment of progress, reflections about the progress made, and continuing the improvement cycle are all critical steps that take place during this phase of professional development.</p>	<p>The final phase allows collaborative learning communities to reflect on the progress made by individuals. The positive outcomes of professional development should be shared in order to maximize the impact on the entire organization. Extending impact allows the positive progress to be replicated for use with other populations or for other campuses within the same school system.</p>

Table created by Kordney Govan, but adapted from Tucker, K (2013). Insights for Learning.

Presentation Availability

It is intended for professional learning activities to continue on an ongoing basis. A large portion of learning will take place through job-embedded training. Learning through practice allows adult learners to gain a deeper understanding of how their newly developed skills move from theory to practice. The pieces of training offered through this action plan will be strategically introduced to the identified stakeholders. District and campus-level leadership will receive training and participate in structured learning activities throughout the summer during their instructional leadership planning. Teacher leaders and other instructional support staff could also receive training over the summer before all other campus professionals receive their training at the beginning of August.

It isn't uncommon for new professionals to begin after staff development has taken place in August. Initial training given at the beginning of the year can be delivered through web-based training that will be available all school year long. Web-based training will benefit professionals who may require an update or "refresher" in order to clarify their understanding of the concepts/skills presented during initial training. A goal of this professional development is to transform practices in order to support the needs of all students. Professional development that is fragmented and episodic does not bring about change that is expected. Continuous and sustained professional development that allows the targeted audience multiple opportunities to learn and engage with content has the greatest potential to transform practices and achievement for all student populations.

Assessment/Evaluation

Well-designed professional development incorporates tools and practices to evaluate the effectiveness of the learning that took place. Evaluating professional

development opportunities allow for developers to adjust their practices, gain a deeper understanding of what is working and what is not, and tailor future professional development endeavors to the needs of the adult learners. This plan will utilize tools such as pre and post-tests to evaluate the understanding of the participants before and after the training. Other tools such as observation checklists, participant questionnaires, Likert-scale surveys, and professional learning journals are various tools that will be utilized to assess and evaluate the outcomes of the given training. Either of these tools could be used as formative assessments to evaluate learning taking place during the training. Quizzes, feedback from instructional coaches, and feedback from participants on implementation could serve as a summative assessment. Ultimately, it is important to evaluate the main goal of professional development--improved student outcomes. A few examples of such tools will follow. Through the use of these evaluation tools, data will be collected and analyzed to inform future practice. PD evaluation results will be shared at the system level and campus level. This would allow all participants to review the data and work collaboratively to refine practice and improve performance to meet their identified goals.

Thomas Guskey, a researcher of education and educational reform, developed five levels of evaluating professional development. Guskey's model for evaluating professional development will be used as a guide for developers to evaluate the effectiveness of the PD and its impact on systemic change. The five levels of evaluation, according to Guskey are: participants' reactions, participants' learning, organization support and change, participants' use of new knowledge and skills, and student learning outcomes (Guskey, 2000).

Table 6

Guskey's Five Critical Levels of Professional Development Evaluation

Evaluation Level	Typical Questions Addressed	Methods of Information Collection	What is Measured or Assessed?	How Will Information Be Used?
Participants' Reactions	Did participants like it? Did the content make sense? Will it be useful? Was the presenter knowledgeable?	Questionnaires Focus groups Interviews Personal learning logs	Initial satisfaction with PD	To improve PD design and delivery.
Participants' Learning	Did the participants acquire the intended knowledge and skills?	Pre/post-tests Summative assessments over the content.	The new knowledge and skills of participants.	To improve programs content, format, and organization.
Organization support and change	What was the impact on the school system? Did it affect organizational procedures? Was implementation facilitated and supported?	District and school data. Questionnaires Focus groups Structured interviews with participants and district leaders.	The system's advocacy, support, accommodations, and facilitation.	To document and improve organizational support. To improve future change endeavors.
Participants' use of new knowledge and skills	Did participants effectively apply new knowledge and skills?	Direct observations Questionnaires Participant reflections (oral or written)	Degree and quality of information.	To document and improve the implementation of PD content.
Student Learning Outcomes	What was the impact on students? Did it affect student performance or achievement? Are students more confident as learners?	Student data School data Structured interviews with students, parents, teachers, or administrators.	Student learning outcomes. Cognitive, affective, and psychomotor.	To focus and improve all aspects of PD design. To demonstrate the overall impact of PD.

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
English learners are a challenging population to teach				
I employ a variety of sheltered instructional strategies to meet the needs of English learners.				
I am comfortable with the sheltered instructional strategies that I use.				
I am confident in my ability to use the English Language Proficiency Standards to drive instruction for English learners.				
I provide English learners with the same rigorous learning opportunities as their native English-speaking peers.				

Figure 2.

Likert-Scale Survey for Participants about English Learners

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I am comfortable with my current understanding of gifted identification practices.				
I believe that some students remain unidentified for giftedness.				
I employ a variety of instructional techniques to accelerate learning for gifted students.				
I am able to recognize the characteristics of giftedness in students.				
I could use more training in the characteristics of giftedness and identification.				

Figure 3.

Likert-Scale Survey for Participants about Gifted Learners

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I prepare a learning environment appropriate for diverse populations.				
I understand the needs of the diverse students in my classroom.				
I prepare lessons that reflect accommodations/modifications for the diversity in my classroom.				
I leverage technology as a means to reach all students.				
I am aware of the diverse learning styles of students in my classroom and make adjustments as necessary.				

Figure 4.

Likert-Scale Survey for Participants about Diverse Student Populations

References

Brewer, M. (2018, September 11). Texas Education Agency- Gifted Talented Education. Retrieved December 2, 2018, from https://tea.texas.gov/Academics/Special_Student_Populations/Gifted_and_Talented_Education/Gifted_Talented_Education/.

Callahan, C. M., Moon, T. R., & Oh., S. (2017). Status of elementary gifted programs. Charlottesville: University of Virginia, The National Research Center on the Gifted and Talented.

Castellano, J. A., & Matthews, M. M. (2014). Legal issues in gifted education. In J. P. Bakken, F. E. Obiakor, & A. F. Rotatori (Eds.), *Gifted education: Current perspectives and issues* (pp. 1-19). Bingley, England: Emerald Group Publishing.

Daniels, V. I. (1998). Minority Students in Gifted and Special Education Programs. *The Journal of Special Education*, 32(1), 41-43. Retrieved October 10, 2018.

Davis, K., Christodoulou, J., Seider, S., & Gardner, H. (2011). *The theory of multiple intelligences*. In R.J. Sternberg & S.B. Kaufman (Eds.), *Cambridge Handbook of Intelligence* (pp. 485-503). Cambridge, UK; New York: Cambridge University Press.. Available at SSRN: <https://ssrn.com/abstract=2982593>.

Digest of Education Statistics, 2010. (n.d.). Retrieved from https://nces.ed.gov/programs/digest/d10/tables/dt10_049.asp.

Eby, J. W. & Smunty, J. F. (1990). *A thoughtful overview of gifted education*. New York: Longman.

Elhoweris, H. (2008). Teacher. *Multicultural Education*, 35-38. Retrieved October 10, 2018.

Every Student Succeeds Act (ESSA). (n.d.). Retrieved December 2, 2018, from <https://www.ed.gov/essa?src=rn>.

Ford, D. Y. (1998). The underrepresentation of minority students in gifted education: Problems and promises in recruitment and retention. *Journal of Special Education, 32*(1), 4–14. <https://doi.org/10.1177/002246699803200102>.

Ford, D. Y., & Grantham, T. C. (2003). Providing access for culturally diverse gifted students: From deficit to dynamic thinking. *Theory into Practice, 42*, 217-225. [doi:10.1207/s15430421tip4203_8](https://doi.org/10.1207/s15430421tip4203_8).

Ford, D. Y., & Whiting, G. W. (2008). Recruiting and retaining underrepresented gifted students. In S. I. Pfeiffer (Ed.), *Handbook of giftedness in children* (pp. 293-308). New York, NY: Springer.

Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly, 29*, 103-112.

Gagné, F. (1995). From giftedness to talent: A developmental model and its impact on the language of the field. *Roeper Review, 18*, 103–111.

Gagné, F. (1999). My Convictions About the Nature of Abilities, Gifts, and Talents in *Journal for the Education of the Gifted, Vol. 22, No. 2, 1999*, p. 109-136.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Guskey, T. R. (2000a). *Evaluating professional development*. Thousand Oaks, CA: Corwin.

Horn, C. V. (2015). Young scholars: A talent development model for finding and nurturing potential in underserved populations. *Gifted Child Today, 38*, 19-31.

Jacob Javits Gifted & Talented Students Education Act. (1988). Retrieved December 2, 2018, from <https://www.nagc.org/resources-publications/resources-university-professionals/jacob-javits-gifted-talented-students>.

Kogan, E. (2001). *Gifted bilingual students: A paradox?* New York, NY: Peter Lang.

Marland (1972) Marland, S. P. (1972). Education of the gifted and talented, Volume 1: Report to the congress of the United States by the U.S. commissioner of education (Vols. 1 & 2), Washington, DC: U.S. Government Printing Office.

McBee, M. T (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *Journal of Secondary Gifted Education*. 17, 103-111.

Mckay, A. S., & Kaufman, J. C. (2013). Intelligence, triarchic theory of. In C. R. Reynolds, K. J. Vannest, & E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: a reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals* (4th ed.). Hoboken, NJ: Wiley. Retrieved from https://search-credoreference-com.ezproxy.lib.uh.edu/content/entry/wileyse/intelligence_triarchic_theory_of/0.

Nagy, S. (2018, October 22). Enrollment Trends. Retrieved from https://tea.texas.gov/acctres/enroll_index.html.

Pre-K to Grade 12 Gifted Programming Standards. (n.d.). Retrieved from <https://www.nagc.org/resources-publications/resources/national-standards-gifted-and-talented-education/pre-k-grade-12>.

Reed, C. F. (2007). We can identify and serve ESOL GATE students: A case study. *Gifted Child Today*, 30(2), 16-22.

Renzulli, Joseph & Piaget, Jean. (2005). The Three-Ring Conception of Giftedness: A Developmental Model for Promoting Creative Productivity. *Conceptions of Giftedness*. 10.1017/CBO9780511610455.015.

Scott, M. S., & Delgado, C. F. (2005). Identifying Cognitively Gifted Minority Students in Preschool. *Gifted Child Quarterly*, 49(3), 199-210.
doi:10.1177/001698620504900302

Siegle D, Gubbins E, O'Rourke P, Langley S, Mun R, Luria S, Little C, McCoach D, Knupp T, Callahan C. *Journal for the Education of the Gifted*, vol. 39, issue 2 (2016) pp. 103-131 Published by SAGE Publications Inc.

Sternberg, R. J. (1982). Lies we live by: Misapplication of tests in identifying the gifted. *Gifted Child Quarterly*, 26, 157-161.

Sternberg, R. J., Castejón, J. L., Prieto, M. D., Hautamäki, J., & Grigorenko, E. L. (2001). Confirmatory factor analysis of the Sternberg Triarchic Abilities Test in three international samples: An empirical test of the triarchic theory of intelligence. *European Journal of Psychological Assessment*, 17(1), 1-16.

United States Department of Education: Office for Civil Rights. (2015). Dear colleague letter: English learner students and limited English proficient parents. Washington, DC: Author.

Yaghoob R, Hossein Z. *Educational Research and Reviews*, vol. 11, issue 4 (2016) pp. 141-145 Published by Academic Journals.

What is Giftedness? (n.d.). Retrieved from <https://www.nagc.org/resources-publications/resources/what-giftedness>.