

Identifying, Recruiting, and Retaining Gifted Students

At the beginning of the 20th Century, and further propelled by the launch of Sputnik on October 4, 1957, an emphasis on identifying our brightest students emerged in American education (McClain & Pfeiffer, 2012, p. 60). These students eventually came to be known as the “gifted and talented” and for the first time, educators and policy makers began to embrace the idea that these students would benefit from instructional practices and content designed to meet their specific educational needs.

Across the globe, definitions of what makes a student gifted and talented vary, but generally, students who operate at higher levels cognitively and creatively than the majority of their peers are placed in this category. Within the United States, there are also variances in definition from state to state. Although at its inception, giftedness was thought to be solely intellectual where the only determining factor was a student’s score on an IQ test, it has become clear in the last two decades that students can be gifted in a variety of ways. Consider the current general definition of “gifted” stated on the National Association for Gifted Children Website, which comes from the United States National Elementary and Secondary Education Act:

Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities (National Association for Gifted Students, n.d.).

Along with the evolving definition of giftedness, identifying and retaining gifted students – especially those who are traditionally underrepresented in gifted programs – is an emerging focus for many school systems throughout the US. The purpose of this interactive literature review table is to provide educators with greater clarity through up-to-date information about identifying, recruiting, and retaining gifted and talented students from all racial, ethnic, socioeconomic and gender groups.

General Information About Identifying Gifted Students

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<p>Gifted students are as varied as any population of students. There are qualities that gifted students may have in common, but giftedness is complex and dynamic and encompasses a wide variety of characteristics. Identifying gifted students must be a comprehensive process that reflects the complexity of what it means to be gifted.</p>	<ul style="list-style-type: none"> ● Giftedness can manifest in students in a variety of ways and it is important to consider the following when identifying gifted students: <ul style="list-style-type: none"> ○ “Gifted students will exhibit their talents not only in a domain but also within a specific area of interest.” Gifted students may perform similarly to their peers on assessments but have a high interest or aptitude in a specific area of study or concept. ○ “Giftedness is a dynamic concept.” A single test score is only part of the picture and does not reveal how a child’s gifts might be developed into talents. ○ “Gifts and talents are exhibited by children who have disabilities, or who come from different ethnic, cultural, and economic backgrounds.” In the United States, underrepresented students in gifted programs tend to be of African American, Latino American, or Native American descent. It is estimated that 1 in 2 gifted students from this population are not included in gifted programs. ○ “Early identification is important to the development of gifts into talents.” This is especially true for students who come from economically disadvantaged backgrounds. When children are appropriately challenged, their gifts develop. (Johnsen, 2009, p.12). ● It is important to note that there is a difference between bright students, gifted students, and highly and profoundly gifted students. All of these students tend to find success in life when they come from a supportive family and enriching learning environments, and each can face difficulties when they do not. Among other differences, consider the following: <ul style="list-style-type: none"> ○ Bright or high-potential students tend to work hard and do well in school. They can be recommended for gifted programs by virtue of their work ethic, academic achievement, and interest in learning. They complete assignments, have good ideas, enjoy school, are alert and focused, and prefer to socialize with their peers. They tend to do well in school and are successful later in life. ○ Gifted students or moderately gifted students tend to play around but test well. For these students identifying IQ levels tend to range from 130 to 135. These students are both mentally and physically involved in what they are learning, can have wild and silly ideas, enjoy learning, and tend to prefer adults. They also tend to do well in school and 	<p>Traits of Giftedness</p> <p>Who are Gifted or Highly Capable Students</p> <p>What Makes a Gifted Student?</p> <p>Is Your Child Gifted? What to Look for. Why You Should Know</p> <p>National Association for Gifted Children: Identification</p>

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	<p>be successful later in life.</p> <ul style="list-style-type: none"> ○ Highly and profoundly gifted students tend to be more vulnerable than the other two categories of students. For these students, IQ levels are often at or well above 145. These students have unusually high scores on assessments such as the SAT, or unusually high interest, productivity, or skill levels in areas and content of interest to them. They can struggle relating to their peers and can have unrealistic expectations for themselves or face such expectations from others. For this particular population of gifted students, researchers note that “areas of vulnerability include <ul style="list-style-type: none"> ▪ Uneven development, ▪ Perfectionism, ▪ Intense sensitivity, ▪ Alienation, and ▪ Role conflicts ● There are different phases for the identification of gifted students, which include the following: <ul style="list-style-type: none"> ○ Nomination – In this phase <i>all students should have the opportunity to be considered for the gifted program</i>. Communications to parents should be in their home languages, outline the details and opportunities of the gifted program, and invite all students to be screened. When possible, teachers of gifted students should work with small groups of potentially gifted students to observe their traits, talents, and interests. Some of the tools, assessments, and information that can be used in a comprehensive screening process for giftedness include the following: <ul style="list-style-type: none"> ▪ Intellectual domain (IQ) <i>Stanford-Binet</i> or <i>Wechsler</i> Intelligence Scales or similar achievement tests; ▪ Universal screening using a short, non-verbal assessment; ▪ Student academic performance, previous and current; ▪ Student portfolios; ▪ Student background information; ▪ Student creativity; 	<p>Vulnerabilities of Highly Gifted Children</p> <p>National Association for Gifted Children: Tests & Assessments</p> <p>Level II Gifted Evaluation Teacher Rating Scale</p> <p>Multicultural Issues: Recruiting and Retaining Black and Hispanic Students in Gifted Education Equality Versus Equity Schools</p> <p>The Stanford-Binet Intelligence Scales</p>

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	<ul style="list-style-type: none"> ▪ Nominations/referrals from teachers, students, parents, and peers; and ▪ Teacher and parent behavioral checklists and rating scales. ○ Screening or Identification – In this phase, tests that are designed to identify gifted students can be utilized. Having experts observe, interact with, and interview potentially gifted students is also an important component of this phase. Evaluators need to be well trained in accurately analyzing data. Some specific assessments that might be used at this phase include the following: <ul style="list-style-type: none"> ▪ Individually administered or group administered assessments, ▪ Professional observation and interviews, and ▪ Portfolio and product performance assessments including auditions. ○ Selection or Placement–In this phase a committee of professionals trained in gifted education determines which students qualify for gifted services. A case study or profile of potentially gifted students is recommended to assist in this process. Research suggests that this committee carefully reviews each student making certain that the following occurs: <ul style="list-style-type: none"> ▪ “Assessments are equally weighted; ▪ Best performance is used as an indicator of potential; ▪ Quantitative scores are comparable; ▪ Errors in assessments are considered; and ▪ Performance over time is described” (Johnsen, 2009, p. 14). ● Some schools use a variety of categories and levels within those categories in their gifted education programs. For example, students may qualify for gifted services in one or more of the following four categories: <ul style="list-style-type: none"> ○ “Superior cognitive ability, ○ Specific academic ability, ○ Creative thinking ability, and ○ Visual performing arts ability” (Harris, Rapp, Martinez, & Plucker, 2007, pp. 26-27). 	<p>Wechsler IQ Test</p> <p>WISC-IV: Using the General Ability Index</p> <p>Introducing the Woodcock-Johnson® IV</p> <p>Raven's Progressive Matrices</p> <p>What is the Naglieri Nonverbal Ability Test?</p>

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	<ul style="list-style-type: none"> ● Across the country, the categories used for determining giftedness in students vary but generally include the following: <ul style="list-style-type: none"> ○ General ability (e.g., IQ); ○ Special ability (e.g., aptitude in a specific area); ○ Non-intellective facilitators (e.g., dedication to a chosen field, strong self-concept, willingness to sacrifice, mental health); and ○ Environmental influences (e.g., parents, classroom, peers, culture, social class) (Johnsen, 2009, p. 9). ● Many advocates recognize giftedness as broader than an IQ score and support the use of multiple assessments and a variety of approaches to identify all levels of gifted students within a school or district. There are a variety of assessments that are utilized to identify gifted students. Some of the more commonly used assessments in the United States are noted in the following list: <ul style="list-style-type: none"> ○ The <i>Stanford-Binet Intelligence Scales</i> (IQ Test) ○ The <i>Wechsler Individual Achievement Test</i> (IQ Test) ○ The <i>Naglieri Nonverbal Ability Test</i> (Culturally neutral evaluation of students' nonverbal reasoning) ○ <i>Raven's Progressive Matrices</i> (Nonverbal test that measures nonverbal reasoning) ○ The <i>Cognitive Abilities Test</i> or CogAT (Measures learned reasoning and problem-solving skills in three different areas: verbal, quantitative, and nonverbal.) ○ The <i>Woodcock Johnson Tests of Achievement</i> (Measures students' academic performance, oral language competence, and cognitive abilities). ● John C. Raven's <i>Progressive Matrices</i> is one of the most widely used assessments of giftedness in children. It measures "cognition of figural relations, spatial ability, accuracy of discrimination, reasoning by analogy, logical relations, and inference" (Silverman 949). The benefits of this assessment include the following: <ul style="list-style-type: none"> ○ It is simple to administer. 	<p>Understanding the Cognitive Abilities Test (CogAT)</p> <p>State Board Approved Test List for the Identification of Gifted Students in Arizona</p>

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	<ul style="list-style-type: none"> ○ It is nonverbal. ○ It is culturally reduced. ○ It is untimed and quick to administer (15-45 minutes). ○ It can be administered individually or in groups. ○ It is inexpensive. <ul style="list-style-type: none"> ● One noteworthy limitation of Raven’s <i>Progressive Matrices</i> is that it has a cap on the IQ level that it measures, which is the 99th percentile or 135. Therefore, it is not necessarily a good tool to use for identifying highly gifted students. ● It is recommended that Raven’s <i>Progressive Matrices</i> be administered with a vocabulary exam in that “The combination of the <i>Progressive Matrices</i> and a vocabulary test has been used successfully to select culturally diverse gifted children in the United States and abroad” (Silverman, 2009, p. 950). ● The Weschler Intelligence Scales measure students’ IQ levels and is the most widely used assessment to identify gifted students at all levels across the globe. The Weschler has been translated into 25 languages and it emphasizes verbal and nonverbal scores nearly equally. Among the benefits of using this assessment to identify gifted students are the following: <ul style="list-style-type: none"> ○ Each test yields three IQ scores: Verbal, Performance, and Full-scale. ○ Students whose first language is not English can often take the exam in their native languages. ○ The test can be broken down into sub-categories to focus on specific abilities. ○ The test is relatively easy to administer and requires less training than many other assessment options. ○ The test has versions for specific age groups including the WISC-III and WISC-IV, which were designed for students ages 6 to 16, the <i>Weschler Preschool and Primary Scale of Intelligence</i> (WPPSI) for students as young as 3, and the <i>Weschler Adult Intelligence Scale</i> (WAIS) for age 16 and older. 	

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	<ul style="list-style-type: none"> • Limitations to the WISC-III include the following: <ul style="list-style-type: none"> ○ While youth age 16 might take the WISC-III, their scores can be depressed because they are likely hitting the ceiling of the test. ○ The Performance subtests are heavily timed. ○ The attainable scores on this exam make it difficult to identify twice-exceptional students and nearly impossible to identify highly gifted students (160-175+ IQ scores). ○ The greatest weakness of this version of the exam is the offering of bonus points for speed. • The WISC-IV (2003) focuses on Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed. <ul style="list-style-type: none"> ○ The Perceptual Reasoning Index is a superior measure of abstract visual reasoning than other versions of the Weschler scales and is a better predictor of students' success in gifted programs as a result. ○ This version of the test also offers greater flexibility in that there are 10 core subtests and five optional tests to use with students. ○ There are higher ceilings on some of the subtest items and the test is a stronger measure of nonverbal reasoning. ○ The exam is an excellent tool to assess the strengths and weaknesses of twice-exceptional students, specifically when the General Abilities Index (GAI) is used. • Limitations to the WISC-IV stem from the increased focus on processing speed and short-term memory, which accounts for 40% of the Full-Scale IQ score. <ul style="list-style-type: none"> ○ Ultimately research has shown that gifted students do not perform faster on processing tasks than average students and that students who may not have high processing speed ability still excel in gifted programs. <ul style="list-style-type: none"> ▪ In fact, students' Processing Speed scores often depress their Full-Scale IQ 	

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	<p>scores and many researchers argue that processing speed should not play a role in assessing giftedness.</p> <ul style="list-style-type: none"> ▪ Because of this, if schools use the WISC-IV “it is not appropriate to require a Full-Scale IQ score on the gifted range for selection to gifted programs” (Silverman, 2009, p. 966) ▪ The General Abilities Index (GAI) in the WISC-IV can replace this score for students whose processing speed and working memory scores are significantly lower than their verbal comprehension and perceptual reasoning skills. <ul style="list-style-type: none"> • The Stanford-Binet Intelligence Scales, Fifth Edition in particular serve as an excellent supplementary indicator of the varied levels of giftedness of all students, from bright students to the highly-gifted, from poor students to those who are economically privileged for the following reasons: <ul style="list-style-type: none"> ○ “It is the only IQ test that can discriminate children in the exceptionally and profoundly gifted range of intelligence. ○ The ratio-based scoring used to derive formula IQ scores beyond the norms in the manual allows a greater spread of scores. ○ Its high ceiling makes it ideal for out-of-level testing” (Silverman, 2009, p. 953). ○ Its emphasis on abstract verbal abilities helps to identify gifted minority students. ○ The test is untimed and so it provides a fairer assessment of children with visual or motor challenges or difficulties with processing speeds. ○ “It has a strong research base, high predictive validity, and a long history of successful use with gifted populations” (Silverman, 2009, p. 953). • A few things to consider regarding the use of IQ scores to identify gifted students include the following: <ul style="list-style-type: none"> ○ It is important to note that while IQ tests tend to receive the most criticism regarding the identification of gifted students, students’ IQ scores are “some of the best measures for potential” in academic achievement and occupational success (Erwin & Worrell, 2012, p. 	

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	<p>77).</p> <ul style="list-style-type: none"> ○ Because of the correlation between IQ scores and students' academic potential, it is recommended that all students' IQ scores be tested early in their schooling to provide educators more data regarding students' academic aptitude and potential giftedness. ○ Note that the relationship between IQ and schooling is complicated in that students with higher IQ scores tend to stay in school longer, and students who stay in school longer increase their IQ scores (Erwin & Worrell, 2012, p. 77). <ul style="list-style-type: none"> ● The differences in how boys and girls perform on some of the assessments is worth noting. Research has shown the following: <ul style="list-style-type: none"> ○ Girls tend to perform better on assessments that are tied to class time instruction. ○ Boys tend to perform better when items on an assessment are independent of class time instruction, when tasks are less familiar. ○ The differences in how boys and girls perform on gifted assessments reveals implications for understanding students' self-perceptions of their abilities and the vocational choices that they make on the basis of those perceptions" (Lohman & Lakin, 2011, pp. 405-406). ○ Likewise, these differences in performance should be considered when identifying students for gifted programs ● Above grade level exams will help identify gifted students who show high skill levels in specific areas. For example, the SAT is for elementary or middle school students with high verbal skills, and Algebra I exam can be used for an elementary school student with high mathematical skills. 	

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<p>Students of African American, Native American, and Latino descent, as well as students who are economically disadvantaged, English language learners, or twice-exceptional children are statistically less likely to be included in gifted programs when compared to their Asian, Caucasian, and neurotypical peers. Females are also less likely than males to be in gifted programs. Special consideration and practices need to be in place in order to identify these underrepresented gifted students.</p>	<ul style="list-style-type: none"> ● There are commonly three groups that are under identified as gifted in the United States: children from minority populations, children with disabilities, and females: <ul style="list-style-type: none"> ○ Minority populations are underrepresented possibly due to assessment tools and procedures that may not be normed for children from diverse backgrounds. ○ Children with disabilities are often receiving special education services and as a result, they are not considered intellectually or creatively gifted. These children are sometimes <i>twice-exceptional</i>, but their giftedness often goes unrealized. ○ Females are also less likely than males to be considered for gifted programs. The combined results from 130 studies published between 1975 and 2011 indicated that boys were 1.19 times more likely than girls to be identified as gifted and included in gifted programs (Peterson, 2013). ● Extensive research has been conducted to determine the reasons that some groups are underrepresented in gifted programs. There are a number of research-based theories that explain the underrepresentation of these students that include, but are not limited to, the following: <ul style="list-style-type: none"> ○ The achievement gap that reflects a resource gap for economically disadvantaged students and is evident in lower test scores on unbiased assessments that are traditionally used to qualify students for gifted services; ○ Biased assessments that lack cultural and experiential relevance for students that are not part of the white middle class in the United States; ○ Implicit bias that fuels low teacher expectations in classrooms where students are minorities, have special needs, are low achievers, English Language Learners, or economically disadvantaged; ○ Teacher selection, which is characterized by teachers often selecting compliant students rather than challenging students who may have more gifted potential; ○ Fewer opportunities to demonstrate qualities of giftedness that are recognized in the United States, especially when students have limited English proficiency or come from varied cultural backgrounds; and 	<p>Identifying and Serving Traditionally Underrepresented Gifted Students</p> <p>Minority Students Underrepresented in Gifted Programs</p> <p>Too Few ELL Students Land in Gifted Classes</p> <p>Twice Exceptional Students</p> <p>Students Affected by Achievement Gaps</p>

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	<ul style="list-style-type: none"> ○ The cultural pressure on minority students to be authentic members of their ethnic group by not “acting white” because being academically motivated is seen as being part of white culture rather than their own. ● Considering the challenges to the inclusion of underrepresented students in gifted programs, researchers recommend that educators engage in the following programs and practices: <ul style="list-style-type: none"> ○ Receive ample and thorough training in cultural competence and gifted education as teacher candidates and via professional development once they enter the field. ○ Focus teacher training on the importance of respecting and valuing cultural differences, irrespective of socioeconomic status. ○ Celebrate neurodiversity, recognizing that brains and how people think are very different and that novel concepts arise from this ability to think differently. ○ Confront and overcome implicit biases that may impact their awareness of gifts and talents in students from specific racial or ethnic group, genders, and from lower socioeconomic groups. ○ Prepare teachers to become better talent spotters for all gifted students. ○ Provide multiple entry points into gifted programs by offering opportunities for students to retest or qualify for programs at later times as their skills develop. ○ Employ a comprehensive review of underrepresented students’ work and performance rather than limit the qualifying assessment to an exam. ○ Implement universal screening using a short nonverbal test, with high scorers referred for I.Q. testing. This method is proven to increase the number of underrepresented students served by programs for gifted students. ● One researcher provides this perspective: “Because the discrepancy between potential and accomplishment will be greatest for those who have had the fewest opportunities, consider weighting accomplishment more heavily for advantaged students and potential for students whose educational opportunities have been more limited” (Lohman, 2005a, p. 35 in Erwin & Worrell, 2012, p. 81). 	<p>Identifying Gifted and Talented English Language Learners: A Case Study</p> <p>Identifying Gifted and Talented English Language Learners</p> <p>Kamm Solutions’ Interactive Literature Review on Implicit Bias</p> <p>NYT Article About Universal Screening</p>

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	<ul style="list-style-type: none"> ● Teachers need to receive training to be able to identify the cultural, linguistic, or cognitive skills of gifted children who <ul style="list-style-type: none"> ○ Have special needs; ○ Are of cultural backgrounds that are different from their own; and ○ Are learning English. <ul style="list-style-type: none"> ▪ To this end, it is recommended that at least some of the gifted education instructors should be fluent in the ELL students' native language. Direct-English instruction need not be part of the gifted program; rather a bilingual approach to instruction is favorable. ● Local and statewide definitions of giftedness need to include a broader range of characteristics that are inclusive and align with various cultural definitions of giftedness (Harris, Rapp, Martinez & Plucker, 2017, p. 371). In addition to the traditional tools used to identify gifted students, there are multiple tools educators can use to conduct a comprehensive review of students' scores and performance to assess underrepresented students for giftedness. Note the following suggested assessment tools: <ul style="list-style-type: none"> ○ Non-verbal assessments where underrepresented students tend to score much higher than they do on traditional gifted assessments; ○ Performance-based assessments where students solve functional problems using multiple steps; ○ Standardized test scores keeping in mind that scores will likely reflect the achievement gap; ○ Domain specific achievement tests where students demonstrate specific skills and critical thinking regarding specific topics they are interested in or in which they have high aptitude; ○ Interviews with students regarding their interests and goals; ○ Student submitted coursework of which students are particularly proud; ○ Referrals from students, parents, and teachers; and 	

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	<ul style="list-style-type: none"> ○ Letters of recommendation from teachers of subjects in which students demonstrate specific aptitude or potential. ● Poor and minority students perform better during comprehensive gifted assessments when <ul style="list-style-type: none"> ○ They understand the tasks they are to complete; ○ The evaluators are not only able to clearly explain to the students what they are to do but understand how to accurately evaluate the students' performance; and ○ There is reliability in the scoring methods. ● Students need to be encouraged to do their best work as they are being evaluated. Students will produce their best work when <ul style="list-style-type: none"> ○ They are encouraged, and they know that the teacher believes in their ability; ○ They don't know that they are being evaluated; ○ They are able to use interesting materials; ○ They are engaged in the work over time, such as several weeks, rather than in one sitting; and ○ They are asked to reflect on their progress--what they have learned, what they still want to learn, what they should do differently. ● Twice-exceptional students (those who are gifted and have other learning issues) often fly under the radar for assessing giftedness. Gifted educators need to increase their awareness of these students. Indeed, "specific characteristics of twice-exceptional students vary. However, students with academic characteristics of twice-exceptionality often: <ul style="list-style-type: none"> ○ "Struggle with basic skills due to cognitive processing difficulties; need to learn compensatory strategies in order to master basic skills; ○ Show high verbal ability but extreme difficulty in the written language area; may use language in inappropriate ways and at inappropriate times; ○ Experience reading problems due to cognitive processing deficits; ○ Excel in solving "real-world" problems; have outstanding critical thinking and decision- 	

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	<p>making skills; often independently develop compensatory skills; and</p> <ul style="list-style-type: none"> ○ Show attention deficit problems but may concentrate for long periods in areas of interest” (Hanover, 2017, p.13). <ul style="list-style-type: none"> ● Cognitively and behaviorally, twice-exceptional students may exhibit the following: <ul style="list-style-type: none"> ○ “Demonstrate strong observation skills but have difficulty with memory skills; ○ Have strong questioning attitudes; may appear disrespectful when questioning information, facts, etc. presented by teacher; ○ Display unusual imagination; frequently generate original and at times rather “bizarre” ideas; extremely divergent in thought; may appear to daydream when generating ideas; ○ Exhibit leadership ability; is often a leader among the more non-traditional students; demonstrating strong “street -wise” behavior; or the disability may interfere with the student’s ability to exercise leadership skills; ○ Show a wide range of interests but may be thwarted in pursuing them due to processing or learning problems; and ○ Very focused interests, for example, a passion about certain topics to the exclusion of others, often not related to school subjects” (Hanover, 2017, p. 14). ● Further recommendations for identifying underrepresented gifted students include taking into consideration the following: <ul style="list-style-type: none"> ○ A thorough examination of students’ prior academic achievement may predict their future achievement and potential for giftedness, as long as the access to educational experiences is equitable. ○ Using local and group specific norms rather than national norms, to determine giftedness will provide data for underrepresented students who show high achievement in their normative group, rather than the whole group where economic advantage correlates with more opportunity and higher achievement. <ul style="list-style-type: none"> ▪ Coupled with the use of teacher rating scales to identify underrepresented students, this practice of establishing local and group specific norms compensates 	

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	<p>for underprivileged gifted students' lack of previous opportunities to learn.</p> <ul style="list-style-type: none"> ▪ Rather than focusing on the top 5% or 10% of students in the whole school, for example, a school can focus on the top 5% or 10% of students who are receiving free or reduced lunch, or the same top percentage of students who are learning English (Peters & Gentry, 2012, p. 129). <ul style="list-style-type: none"> ● There is also gender inequity in gifted programs: <ul style="list-style-type: none"> ○ The combined results from 130 studies published between 1975 and 2011 indicated that boys were 1.19 times more likely than girls to be identified as gifted and included in gifted programs, approximately six boys for every five girls (Petersen, 2013). ○ Teachers who were given identical student profiles for boys and girls were more likely to nominate the boys for a gifted program than the girls (Bianco, Harrison, Garrison-Wade, & Leech, 2011). ○ Teachers have been proven to have more difficulty in identifying giftedness in girls rather than boys (Endepohis-Ulpe, 2008). ○ Parents judgments of their daughters' cognitive capabilities are also underestimated when compared to their sons' (Endepohis-Ulpe, 2008). ○ Girls who are early high achievers do tend to have diminishing giftedness as they enter adolescence and beyond (Vaughn, Bos, & Schumm, 2013). Around the age of 12, gifted boys outnumber gifted girls. Consider the following reasons: <ul style="list-style-type: none"> ▪ Being popular is more important to girls, so they downplay their cognitive and artistic abilities. ▪ Gender stereotyping occurs and girls are less likely to be channeled into careers (math/science). ▪ Fewer female role models and accomplishments included in texts and curriculum. 	

Recruiting Gifted Students		
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<p>Traditionally, the recruitment process for gifted programs has unintentionally utilized efforts to recruit white middle class students. Research shows that these students will continue to be part of gifted education, but that it is the underrepresented students who need to be the focus of gifted education recruitment practices.</p>	<ul style="list-style-type: none"> ● Research recommends the following practices to recruit all gifted students <ul style="list-style-type: none"> ○ “Target equity goals to determine minimal representation of students, mainly those who are Black and Hispanic (underrepresented students). ○ Adopt universal screening early and at several grade levels; screening, identification, and placement should be ongoing. ○ Adopt talent development models and opportunities ○ Adopt non-verbal measures in screening and assessment, and do not disregard the non-verbal subscale of traditional tests. ○ Adopt local norms when districts have income and racial differences throughout buildings and parts of the district. ○ Examine the efficacy of referrals and nominations by teachers and families/caregivers for underrepresented groups. ○ Be proactive and aggressive in outreach to parents/caregivers from under-represented groups so they can support and advocate for their children. ○ Be proactive and aggressive at training school personnel in gifted education <i>and</i> culturally responsive education. ○ Adopt an equity philosophy for recruiting and retaining culturally different gifted students” (Ford, 2015b, p. 191). ● A multicultural approach to curriculum helps to recruit gifted students, especially those who are underrepresented or who come from diverse backgrounds. In order to create a multiculturally sensitive school culture and an equitable curriculum for the gifted program, consider the following suggestions: <ul style="list-style-type: none"> ○ All the adults on a campus need access to professional development activities that not only help them understand diverse cultures but also the needs of gifted students who come from those cultures. ○ The multicultural curriculum that is implemented needs to have as its goal an increased understanding and acceptance of other cultures to help students and teachers better understand each other (Ford, Grantham & Harris, 1996, p. 386). 	<p>6 Ways to Implement a Real Multicultural Education in the Classroom</p> <p>Recruiting and Retaining Black and Hispanic Students in Gifted Education: Equality Versus Equity Schools</p> <p>Kamm Solutions' Interactive Literature Review Table on Overcoming Implicit Bias</p> <p>Seven Ideas for Revitalizing Multicultural Education</p>

Recruiting Gifted Students		
Main Ideas	Additional Information	Resources
	<ul style="list-style-type: none"> ● Recruitment of underrepresented gifted students also occurs when schools <ul style="list-style-type: none"> ○ Increase teacher diversity, as a diverse teaching staff improves both achievement and overall morale; ○ Collaborate with and reach out to uninformed families so that the parents of traditionally underrepresented students feel supported, heard, cared about, and included; ○ Provide mentoring to underrepresented students, as the more advocates the students have, the better they perform; and ○ Promote a scholar identity among underrepresented students in an effort to diminish the acceptance of low expectations and negative stereotypes regarding their academic abilities and intelligence (Ford, 2012, p. 75). ● Schools that embrace equity rather than equality practices in recruiting underrepresented students have gifted programs that are designed to do what they were intended to do: serve the needs of the brightest students for whom the general classroom experience is not challenging enough. These schools recruit and retain traditionally underrepresented gifted students because they embrace practices that are equitable rather than equal. <ul style="list-style-type: none"> ○ Schools that promote equality focus on sameness regardless of access to opportunities and resources and students' needs. These schools will have a small percentage of traditionally underrepresented students in their gifted programs. They tend to rely on teacher referrals, use one qualifying assessment--typically an IQ test--, and test all students when they reach second grade. ○ In contrast, schools that promote equity recognize that all students do not have the same opportunities and resources. They rely on teacher input, but they hire consultants or gifted experts to study the correlation between teacher referrals and the ethnicity and income level of students who are referred. They incorporate instructional practices that close the achievement gap. They incorporate comprehensive testing that is traditional and non-traditional and goes beyond relying on an IQ score alone. 	<p>Key Theories and Frameworks for Improving the Recruitment and Retention of African American Students in Gifted Education</p>

Engaging and Retaining Gifted Students

Main Ideas	Additional Information	Resources
<p>Recruiting gifted students does not guarantee retention in a gifted program. Gifted education programs can present various challenges for students beyond accelerated content and assignments. In order to truly challenge and retain gifted students, future-focused programs that stimulate students' curiosity; critical thought; real-world connections; meaningful collaboration; and social, emotional, and academic growth are imperative.</p>	<ul style="list-style-type: none"> ● Gifted education programs can be complex socially, emotionally, and intellectually and can often “breed social isolation, academic competition, and intellectual arrogance”, which is in stark contrast to the ideal combination of an academically challenging, but trusting and safe learning environment (Ford, Milner & Moore, 2005, p. 53). ● High quality gifted programs address the social, emotional, and academic needs of gifted students. Such programs embrace a curriculum that addresses the whole child, rather than simply focusing on students' academic development (NAGC, n.d., <i>Nurturing social and emotional development</i>). ● Gifted education is not a one-size fits-all endeavor, but it is often treated as such. Students who tend to fare well in gifted education have a high level of academic competence, learn quickly and are generally committed to learning. However, just because a group of students is called “gifted” does not mean they all should be learning the same things, in the same way, and at the same time and pace. Students who are designated as gifted are just as diverse as any group of students. ● In order to retain gifted students, high-quality gifted education matches the program to the needs of its diverse students. Consider the following practices: <ul style="list-style-type: none"> ○ Develop the structure of a high-quality gifted program according to the students' needs and also the district and community resources (Hanover, 2017). ○ Provide multiple levels of gifted service and allow students to grow and develop their giftedness. Research shows that simply providing advanced or accelerated content is insufficient in meeting gifted students' needs. ○ Reflect students' interests and needs through the content, pedagogy, and instructional practices within gifted education programs (Peters & Gentry, 2012, p. 137). Consider the following suggestions: <ul style="list-style-type: none"> ▪ High-quality gifted programs focus on “creating a learning environment in which the learners can step into their highest future potential in the context of hands-on societal challenges” (Scharmer, 2018, n.p.). High quality gifted 	<p>Beyond Testing: Social and Psychological Considerations in Recruiting and Retaining Gifted Black Students</p> <p>Kamm Solutions' Interactive Literature Review Table on Whole Child: Social and Emotional Learning</p> <p>5 Tips for Better Relationships with Your Students</p> <p>5 Requirements for Building Trust in the Classroom</p>

Engaging and Retaining Gifted Students		
Main Ideas	Additional Information	Resources
	<p>experiences allow student choice and an authentic opportunity to share their voices with adults in a real-world context.</p> <ul style="list-style-type: none"> ▪ High quality gifted learning experiences incorporate a combination of the following approaches: <ul style="list-style-type: none"> • Differentiated instruction, • Acceleration, • Interest-based enrichment, and • Problem-based learning. • Problem-based learning is an especially effective format for gifted programs in its student-centered, problem-solving approach that stimulates students to <ul style="list-style-type: none"> ○ Have both a voice and a choice in what they learn and how they want to learn it, ○ Engage in collaboration, ○ Focus on real-world problems, ○ Implement critical and innovative thinking when posing a solution, and ○ Experience cross-curricular approaches to learning. • Involving parents in gifted programs is key to retention of students: <ul style="list-style-type: none"> ○ “Bilingual personnel should be provided at PTO (Parent Teacher Organization) meetings, after-school parent sessions, school open houses, and so forth. This improves the likelihood that parents will attend such events and will make them feel more connected. ○ All materials sent home to parents also should be provided in Spanish or the parent’s native language. ○ Classes and seminars (e.g., to learn English or to address other topics related to child development) can be offered. ○ Local universities would be a good place to search for people with expertise in various areas who could offer such trainings and sessions at reduced or no cost” (Harris, 2007, p. 387). 	<p>Kamm Solutions’ Interactive Literature Review on Building Trust in Schools.</p> <p>Six Strategies for Challenging Gifted Learners</p> <p>Kamm Solutions Interactive Literature Review on Personalized Learning and Competency-Based Instruction</p> <p>Kamm Solutions’ Interactive Literature Review on Problem-Based Learning</p>

Engaging and Retaining Gifted Students

Main Ideas	Additional Information	Resources
	<ul style="list-style-type: none"> • Retaining gifted students also requires educators to focus on developing the students' specific talents. Consider the following practices: <ul style="list-style-type: none"> ○ Conduct ongoing interviews with students regarding what inspires and interests them. ○ Engage in teacher/expert observation in identifying students' special skills. ○ Request student input regarding coursework and project design. ○ Invite parent input regarding students' interests and strengths. ○ Allow students to determine what they want to learn and provide students with opportunities to choose the path they want their inquiry to take. ○ Encourage students to collaborate with their peers, with professionals or university personnel in their line of inquiry, and/or with organizations or business that relate to the content they are studying, etc. • The retention of underrepresented students is of particular interest. Just recruiting them into gifted programs is no guarantee that they will remain in them. Research recommends that gifted programs implement "...fair, culturally neutral assessment, and the opportunity for challenging, advanced learning for all students" (Hanover, 2017, p. 3). • In order to develop gifted behaviors in all students, schools should "...provide a level of enrichments to students to increase critical thinking skills, interest, engagement and promote academic achievement" (Hanover, 2017, p. 4). Such an effort helps schools not only identify high-achieving students but also high-potential students. • Educators need to be aware of the challenges specific to underrepresented students. National trends show that too many underrepresented students do not want to be part of gifted education <ul style="list-style-type: none"> ○ If there are too few minority students in the program, ○ If they feel isolated in the program, ○ If they are teased by their ethnic peers for achieving, and ○ If they have a poor ethnic identity (Ford, Milner & Moore, 2005, p. 52). 	<p>Gifted Education Strategies</p> <p>What Is Problem-Based Learning?</p> <p>Problem-Based Learning Overview from Stanford</p> <p>Gold Standard PBL: Student Voice & Choice</p> <p>Using Differentiated Instruction for Gifted Learners</p> <p>Differentiating Curriculum for Gifted Students</p>

Engaging and Retaining Gifted Students		
Main Ideas	Additional Information	Resources
	<ul style="list-style-type: none"> • All students, but especially minority or underrepresented students, stay in gifted programs when they are encouraged to do the following: <ul style="list-style-type: none"> ○ Develop a positive self-concept or self confidence ○ Engage in a realistic self-appraisal ○ Recognize and effectively deal with racism ○ Embrace a preference for long-range goals ○ Receive support from mentors and trusted adults regarding their academic plans ○ Have successful leadership experiences ○ Get involved in their schools and communities through service <p>Obtain knowledge in a field of study that interests them (Ford, Milner & Moore, 2005, p. 54).</p> • In order to combat some of the challenges that underrepresented students face in gifted programs the following additional strategies are effective: <ul style="list-style-type: none"> ○ Continue to embrace and explore a multicultural curriculum. ○ Have high and clearly communicated expectations for all students and express confidence in students' abilities to meet those expectations. ○ Help students create and regularly evaluate realistic and achievable academic goals. ○ Encourage students to be committed to their goals both academically and socially. ○ Establish strong and trusting relationships between the teachers and students and among the students, rather than encouraging academic competition and intellectual arrogance. • Teachers build trusting relationships between students in a variety of ways including the following: <ul style="list-style-type: none"> ○ Allow students the space to make mistakes and learn from them. ○ Ask the students to regularly reflect on their progress and effort. 	<p>Acceleration from NAGC.org</p> <p>Forms of Gifted Education Including Enrichment</p> <p>The Schoolwide Cluster Grouping Model</p> <p>Practical Recommendations and Interventions for Gifted Students</p> <p>Envision Gifted</p>

Engaging and Retaining Gifted Students

Main Ideas	Additional Information	Resources
	<ul style="list-style-type: none"> ○ Be genuinely interested in students' lives. ○ Encourage students to listen to each other, recognize each other's successes and efforts, and work together to solve problems. 	

State and Federal Policy Plus a Focus on Arizona		
Main Ideas	Additional Information	Resources
<p>Not surprisingly, across the country there is great variance in how states define giftedness, identify gifted students, hold gifted programs accountable, fund programs, structure programs, and apply equity to programs. Of greatest concern is whether or not state and federal policies encourage schools to provide for <i>all</i> their gifted students with the learning experiences that they need.</p>	<ul style="list-style-type: none"> ● In recent years, as a result of national and statewide education policies that focus on demonstrating growth, schools have spent more time, energy, and resources focused on helping struggling students perform at grade-level. Gifted advocates recognize that this is a worthwhile endeavor, yet they argue that a school's gifted students likewise need the same level of attention (Woods, 2016). <ul style="list-style-type: none"> ○ The basis of this argument centers on the idea that "...high- achievers play a key role in economic competitiveness – and thus warrant as much attention as low performers" (Woods, 2016, p. 1). ○ Further argument for policies that encourage greater efforts in developing high quality gifted programs is supported by the evidence that participation in gifted programs yields in students "increased academic performance... and improvements in such domains as motivation self-efficacy, engagement with learning, non-academic self-concept, and overall stress" (Woods, 2016, p. 1). ● In the State of Arizona, in order to identify gifted students' current policy, recommends that schools use the single cut off with flexible criterion method. In other words, schools can choose which assessments, tools, and rating scales they want to use to evaluate students in order to measure where students' scores fall in comparison to the cut-off measure, which is at or above the 97th percentile. Many districts use a lower cut-off measure (e.g. 93%) and some have developed local norms to determine who the top-performing <i>and</i> high-potential students are in their schools. <ul style="list-style-type: none"> ○ Students in Arizona can be tested for giftedness as early as age two. ○ Typically, students in Arizona are assessed for giftedness in three areas: verbal, mathematical, and spatial. ○ Arizona's process to identify gifted student includes mandates to focus on finding gifted students who are traditionally underrepresented in gifted programs including minority students, students with special needs (twice exceptional), economically disadvantaged students, and English Language Learners. ● Gifted education policy in Arizona recommends that schools employ equity practices in their 	<p>State and Federal Policy for Gifted and Talented Youth</p> <p>Coaching Tool for Classrooms Supporting Gifted Education</p> <p>State Board Approved Test List for the Identification of Gifted Students in Arizona</p> <p>About Gifted Education from Arizona DOE</p> <p>Gifted Education for Gifted Children from the Arizona Revised</p>

State and Federal Policy Plus a Focus on Arizona		
Main Ideas	Additional Information	Resources
	<p>identification of gifted students.</p> <ul style="list-style-type: none"> ○ Specifically, the focus on identification should consider both talent development for high-potential students and talent enhancement for high-performing students. ○ In identifying these high-potential and high-performing students, Arizona schools are asked to consider the following: <ul style="list-style-type: none"> ▪ “Achievement, Aptitude, and Ability; ▪ Rapidity of English Language Acquisition; ▪ Gifted Characteristics Checklists; ▪ The Power of Pre-Assessment; ▪ Student Portfolio; ▪ Recommendation (<i>Parent, Teacher, Peer, Student</i>); and ▪ Student Interests, Motivation, and Persistence” (Javits, n.d.). <ul style="list-style-type: none"> ● Arizona policy also recommends that schools consider whether the current populations and recommended populations of their gifted programs are an adequate representation of their school’s diverse population. ● Research suggests that states consider the following recommendations to improve their identification and accountability practices as these two focuses are central to incorporating equity and providing students a high-quality gifted education experience: <ul style="list-style-type: none"> ○ “Consider fully funding existing mandates for gifted student identification. ○ Consider how the state could support districts’ ability to conduct universal screening. ○ Explore alternative forms of identification, particularly those that are not dependent on academic achievement alone and offer students multiple opportunities for identification. ○ Consider providing professional development to teachers to improve their effectiveness at identifying gifted students. ○ Consider bolstering state and district efforts to recruit and retain minority teachers” (Woods, 2016, p. 7). ○ “Consider how the state can provide schools and districts with standards for high-quality 	<p>Statutes</p> <p>Gifted Education Resources in Arizona</p>

State and Federal Policy Plus a Focus on Arizona		
Main Ideas	Additional Information	Resources
	<p>gifted programs and guidance for their implementation.</p> <ul style="list-style-type: none"> ○ Collect data on gifted students and programs across the state to better identify how districts support gifted students and better identify inequities between districts. ○ Emphasize high-achievers in state accountability systems by giving greater weight to student growth and students attaining advanced achievement levels and by identifying gifted students as a separate subgroup” (Woods, 2016, p. 7). 	

Bibliography

- Arancibia, V., Boyanova, D., & González, P. (2016). Cognitive characteristics of gifted and not gifted fifth-grade Chilean students from economically vulnerable contexts. *Universal Journal of Educational Research*, 4(4), 744-754.
- Azzam, A. (2016). Six strategies for challenging gifted learners. *Education Update*, 58(4). Retrieved from <http://www.ascd.org/publications/newsletters/education-update/apr16/vol58/num04/Six-Strategies-for-Challenging-Gifted-Learners.aspx>.
- Bauer, S., Benkstein, P., Pittel, A., & Koury, G. (n.d.). *Gifted students: Recommendations for teachers*. Retrieved from <https://www.education.udel.edu/wp-content/uploads/2013/01/GiftedStudents.pdf>.
- Belin, C. (2008). *Identifying gifted and talented English language learners (Grades K-12)*. Iowa City, IA: Iowa Department of Education, The Connie Belin and Jacqueline N. Blank International Center for Gifted Education and Talent Development, The University of Iowa. Retrieved from <https://www.educateiowa.gov/sites/files/ed/documents/IdentifyGiftedTalentedELL.pdf>.
- Brulles, D. (2010). *The schoolwide cluster grouping model. Embracing diversity, increasing achievement, & expanding gifted services during lean financial times*. Retrieved from <http://www.cmcgc.com/media/handouts/301111/203243.pdf>.
- Delisle, J. R. (2012). Reaching Those We Teach. *Gifted Child Today*, 35(1), 62-67.
- Ecker-Lyster, M., & Niileksela, C. (2017). Enhancing gifted education for underrepresented students: Promising recruitment and programming strategies. *Journal for the Education of the Gifted*, 40(1), 79-95.
- Endepohis-Ulpe, M. (2008) Gender, social behavior and domain of ability – Influences on teachers’ diagnoses of giftedness. *Gifted and Talented International*. 23 (1), p. 125-133.
- Erwin, Jesse O., & Worrell, Frank C. (2012). Assessment practices and the underrepresentation of minority students in gifted and talented education. *Journal of Psychoeducational Assessment*, 30(1), 74-87.
- Ford, D. Y. (2015a). Culturally responsive gifted classrooms for culturally different students: A focus on invitational learning. *Gifted Child Today*, 38(1), 67-69.

- Ford, D. Y. (2015b). Multicultural Issues: Recruiting and retaining black and Hispanic students in gifted education: Equality versus equity schools. *Gifted Child Today*, 38(3), 187-191.
- Ford, D. Y. (2012). Ensuring equity in gifted education: Suggestions for change (again). *Gifted Child Today*, 35(1), 74-75.
- Ford, D. Y., Grantham, T. C., & Whiting, G. W. (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children*, 74(3), 289-306.
- Ford, D. Y., Milner, H., & Moore, J. (2005). Recruitment Is Not Enough: Retaining African American Students in Gifted Education. *Gifted Child Quarterly* – *Gifted Child Quarterly*. 49. 51-67. 10.1177/001698620504900106.
- Ford, D. Y., Moore III, J. L., & Scott, M. T. (2011). Key theories and frameworks for improving the recruitment and retention of African American students in gifted education. *The Journal of Negro Education*, 239-253.
- Ford, D. Y., Tarek C. Grantham & J. John Harris III (1996) Multicultural gifted education: *A wakeup call to the profession*, Roeper Review, 19:2, 72-78, DOI: [10.1080/02783199609553794](https://doi.org/10.1080/02783199609553794)
- Ford, D. Y., & Whiting, G. W. (2011). Beyond testing: Social and psychological considerations in recruiting and retaining gifted Black students. *Journal for the Education of the Gifted*, 34(1), 131-155.
- Hanover Research. (2017). *Best practices in gifted and talented education*. Retrieved from: <https://meeting.cabe.org/public/Meeting/Attachments/DisplayAttachment.aspx?AttachmentID=54259>.
- Hanover Research. (2017). *Best practices in gifted education. Prepared for Laguna Beach Unified School District*. Retrieved from https://www.lbusd.org/uploaded/1-District/Departments/Instructional_Services/Documents/GATE/Hanover_Pres._-Best_Practices_in_Gifted_Education_-_LBUSD_-_Update.pdf.
- Harris, B., Rapp, K., Martínez, R., & Plucker, J. (2007) Identifying English Language Learners for Gifted and Talented Programs: *Current Practices and Recommendations for Improvement*, Roeper Review, 29:5, 26-29, DOI: [10.1080/02783193.2007.11869221](https://doi.org/10.1080/02783193.2007.11869221)

Identifying and Serving Traditionally Underrepresented Gifted Students. (2016). Jefferson, MO: Missouri Department of Elementary and Secondary. Retrieved from <https://dese.mo.gov/sites/default/files/qs-Gifted-Underrepresented-Gifted-Students-2016.pdf>.

Javits, J. (n.d.). Key identification considerations for culturally, linguistically, and socioeconomically diverse gifted learners. *Project Bright Horizon*. Retrieved from <http://www.azed.gov/gifted-education/project-bright-horizon/>.

Johnsen, Susan K. (2009). Best practices for identifying gifted students. *Principal*, 88(5), 8-14.

Kornhaber, M. (1999). Enhancing equity in gifted education: A framework for examining assessments drawing on the theory of multiple intelligences. *High Ability Studies*, 10(2), 143-161.

Lewis, J. D., DeCamp-Fritson, S. S., Ramage, J. C., McFarland, M. A., & Archwamety, T. (2007). Selecting for ethnically diverse children who may be gifted using Raven's standard progressive matrices and Naglieri nonverbal abilities test. *Multicultural Education*, 15(1), 38-42.

Lohman, D. & Lakin, J. (2011). Reasoning and Intelligence. *The Cambridge handbook of intelligence*. 10.1017/CBO9780511977244.022.

McClain, M. C., & Pfeiffer, S. (2012). Identification of gifted students in the United States today: A look at state definitions, policies, and practices. *Journal of Applied School Psychology*, 28(1), 59-88.

Minnesota Department of Education. (n.d.). *Identifying under-served student populations for gifted programs: Some methods and frequently asked questions*. Retrieved from https://education.mn.gov/mdeprod/idcplg?IdcService=GET_FILE&dDocName=mde072106&RevisionSelectionMethod=latestReleased&Renderition=primary.

Moore III, J. L., Ford, D. Y., & Milner, H. R. (2005). Recruitment is not enough: Retaining African American students in gifted education. *Gifted Child Quarterly*, 49(1), 51-67.

National Association for Gifted Children. (n.d.). *Nurturing social and emotional development of gifted children. Position statement*. Retrieved from <https://www.nagc.org/sites/default/files/Position%20Statement/Affective%20Needs%20Position%20Statement.pdf>.

National Association for Gifted Children. (n.d.) *Frequently asked questions about gifted education. Position statement*. Retrieved from <https://www.nagc.org/resources-publications/resources/frequently-asked-questions-about-gifted-education>

- National Association for Gifted Children. (n.d.). *The role of assessments in the identification of gifted students. Position statement.* Retrieved from <https://www.nagc.org/sites/default/files/Position%20Statement/Assessment%20Position%20Statement.pdf>.
- National Association for Gifted Children. (n.d.). *Twice-Exceptional Students.* Retrieved from <https://www.nagc.org/resources-publications/resources-parents/twice-exceptional-students>.
- Palmer, D. (2011, May 1). *Is your child gifted? What to look for, why you should know.* Retrieved from <https://www.psychologytoday.com/us/blog/gifted-kids/201105/is-your-child-gifted-what-look-why-you-should-know>.
- Payne, A. (2011). *Equitable access for underrepresented students in gifted education.* Arlington, VA: George Washington University Center for Equity and Excellence in Education. Retrieved from <https://files.eric.ed.gov/fulltext/ED539772.pdf>.
- Periathiruvadi, S., & Rinn, A. N. (2012). Technology in gifted education: A review of best practices and empirical research. *Journal of Research on Technology in Education*, 45(2), 153-169.
- Peters, Scott J., & Gentry, Marcia. (2012). Group-specific norms and teacher-rating scales: implications for underrepresentation. *Journal of Advanced Academics*, 23(2), 125-144.
- Pfeiffer, Steven I. (2012). Current perspectives on the identification and assessment of gifted students. *Journal of Psychoeducational Assessment*, 30(1), 3-9.
- Petersen, Jennifer. (2013). Gender differences in identification of gifted youth and in gifted program participation: A meta-analysis. *Contemporary Educational Psychology*. 38. 342–348.
- Pierson, M.R. (2014). Gifted education in the united states: perspectives of gender equity. *Journal of Gender and Power*, 1(1). 99-110.
- Renzulli, J. S. (2005). *Equity, excellence, and economy in a system for identifying students in gifted education: A guidebook.* Storrs, CT: National Research Center on the Gifted and Talented. Retrieved from <https://files.eric.ed.gov/fulltext/ED505374.pdf>.
- Roedell, W. C. (1984). Vulnerabilities of highly gifted children. *Roeper Review*, 6(3), 127-130. Retrieved from <https://positivedisintegration.com/Roedell1984.pdf>

- Scharmer, O. (2018, January 8). *Education is the kindling of a flame: How to reinvent the 21st-century university*. Retrieved from https://www.huffingtonpost.com/entry/education-is-the-kindling-of-a-flame-how-to-reinvent_us_5a4ffec5e4b0ee59d41c0a9f.
- Silverman, L. K. (2009). The measurement of giftedness. In L. V. Shavinina (Ed.), *International handbook on giftedness* (pp. 947-970). Berlin: Springer Science and Business Media. Retrieved from <https://pdfs.semanticscholar.org/d5b4/fd15824ff74167765a70187e5a8473dd4404.pdf>.
- Slocumb, P. D. & Olenchak, F. R. (2006). *Equity in gifted education: A state initiative*. Austin, TX: Texas Education Agency. Retrieved from http://www.gtequity.org/docs/equity_in_ge.pdf.
- Stambaugh, T. (n.d.). *Developing exemplary gifted programs: What does the research say?* Retrieved from <http://www.ptv.vanderbilt.edu/cms/wp-content/uploads/StambaughTAGLecturePrograms.pdf>.
- Stanley, J. C. (1990). Leta Hollingworth's contributions to above-level testing of the gifted *Roeper Review*, 12 (3), 166–171.
- Vaughn, S., Bos, C.S. & Schumm, J.S. (2013) *Teaching Exceptional, Diverse, and At-Risk Students in the General Education Classroom*. Boston: Allyn and Bacon.
- Vista, A., Wallace, B., & Shaughnessy, M. (2015). Equity in cross-cultural gifted screening from a Philippine perspective: A review of literature. *Gifted Education International*, 31(3), 232-243.
- Woods, J. (2016). *State & federal policy: Gifted and talented youth. Policy analysis*. Retrieved from <https://www.ecs.org/wp-content/uploads/State-and-Federal-Policy-for-Gifted-and-Talented-Youth.pdf>.
- Yassin, S. F. M., Ishak, N. M., Yunus, M. M., & Majid, R. A. (2012). The identification of gifted and talented students. *Procedia-Social and Behavioral Sciences*, 55, 585-593.